# Mater Mothers' Alignment 4

November 8, 2025





Acknowledgement of Country







I wish to acknowledge that not all those who are pregnant or who have given birth identify as women. When we use the terms mother, woman or women during today's discussions, please know that we include those who have a different gender identity.

Artist: Chloe Trayhum

https://www.chloetrayhurn.com/

### Acknowledgments



- MMH
- Drs Huda Safa & Sarah Janssens
- Dr Wendy Burton
- Anne Williamson & Erin Hutley-Clarke GPLM
- The extended MMH GP Shared Care Alignment team

### MMH Alignment 4, 8th November 2025



## Today's facilitator

Dr Margaret (Maggie) Robin

BSC MBBS FRACGP DCH DRANZCOG (Adv) MPHTM

- Rural Generalist GP Obstetrician
- Senior Medical Officer, Beaudesert Hospital







# Getting the most out of your day mater

- Housekeeping
- Questions are welcome :)
- Please raise your hand at the relevant time
- Phone out, but on silent!
  - If you need to take a call, please leave the room
- Screenshots welcome though presentation will be uploaded post event

Depending on the 'depth of the dive', we may have to take some questions on notice and get back to you with an answer post-program.

### **SESSION 1:**

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Time	Session	Who
8:00 am	Welcome: course expectations, learning objectives	Dr Maggie Robin
8:10	What's New	Dr Maggie Robin
8:20	Early Pregnancy Loss	Dr Georgia Heathcote
8:45	Bereavement	Bereavement Midwife Shannon Shorthouse
9:05	Physical birth injuries / OASI	MMH FRANZCOG  Dr Georgia Heathcote  & MMH physio: Sarah Moore
9:25	Trauma-informed Care	Dr Maggie Robin Dr Georgia Heathcote
10:00	Parenting Support	Dr Majella Henry
10.10	A Refugee Story	Jacqui Freeman
10:15	A word from our sponsor (Trudy Braybrook) & Morning tea break	)



### **SESSION 2:**

Time	Session	Who
10:30	Neonatal Examination	Video
10:40	Breastfeeding	Megan Fry Lactation Consultant
11:10	Case work	Dr Lok Tung Lee Dr Georgia Heathcote Shannon Shorthouse Megan Fry
12:50	Conclusion	Dr Maggie Robin

# Program Goals

# Optimal patient experience

- **≻**Educate
- **>**Update
- **≻**Equip
- >Empower



### **Facilitate**

- >Innovation
- **>**Integration
- **≻**Communication

## No one knows everything!



# We need to know

- Enough to make it worthwhile people coming to see us (Education)
- Where to look (Showcase resources)
- Who to call (Build relationships, inform, provide contact numbers)
- When and where to refer (Education, PAC, ED, ANC, Birth Suite)

## Learning objectives



This program is designed to enhance your understanding of:

- 1. Communication pathways with MMH
- 2. New developments in perinatal care
- 3. Management of early pregnancy loss
- 4. Supporting families through bereavement
- 5. Trauma-informed care
- 6. Parenting support resources
- 7. Newborn examination
- 8. Breastfeeding support



### Communication

The importance of getting it right

Dr Maggie Robin

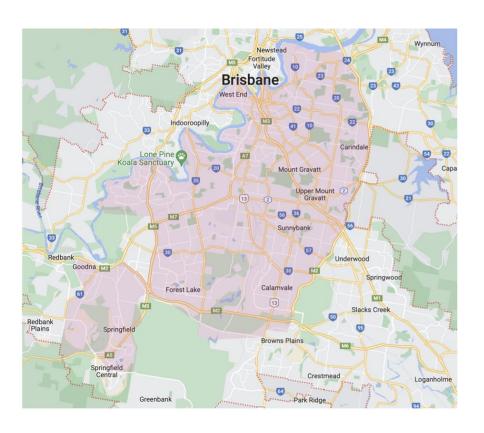
# Linking in to MMH

# Antenatal Clinic (ANC) receives 200-400 referrals a week

- ✓ Information = safe, effective and efficient triage
  - Medical, obstetric, social risk factors
  - Indications for early appointment
- ✓ Need advice? Contact the GP Liaison Midwife
- ✓ The use of an antenatal Smart Referral or the MMH referral template is mandatory. Please include ALL patient information requested.
- ✓cc MMH ANC on <u>ALL</u> investigations

### MMH Catchment Area



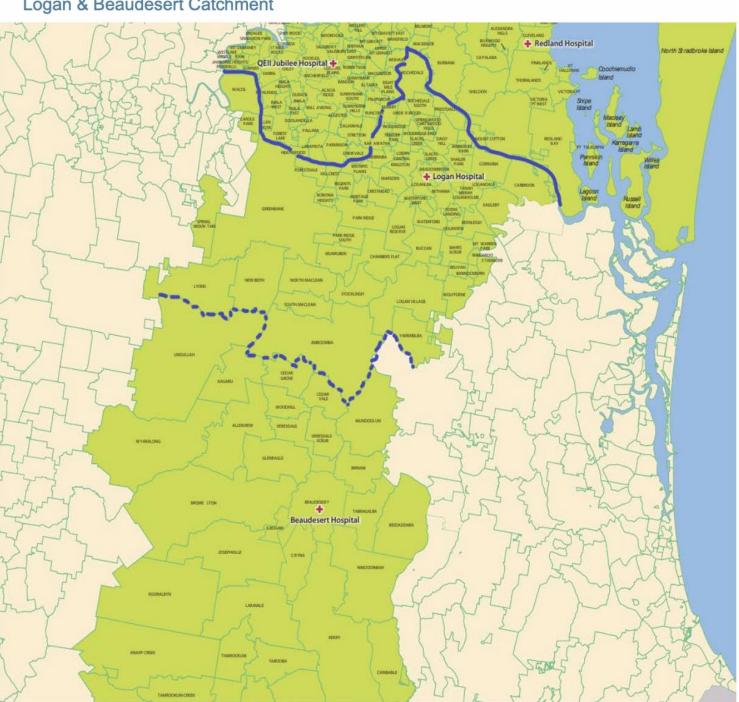


- Refer all women to their local service. If you are uncertain, or if time is critical = contact GPLM.
- > Private hospital, public births
- > Local hospital, tertiary referral centre
- High demand = no routine low risk referrals outside catchment
  - o Exceptions:
    - Aboriginal / Torres Strait Islanders
    - Those requiring a specialist drug and alcohol service

Proof of address is required

Mater Mothers Private has no catchment restrictions

Logan & Beaudesert Catchment





<sup>ਜ</sup> mater	
•mater	health

ANTENATAL REFERRAL Fax number: (07) 3163 8053

Unit Record No.		
Surname		
Given Names		
DOB	Sex	

T GX TIGHTS	(01) 01.				AFFIX PATIE	NT IDENTIFICA	ATION LABE	LHERE	
Patient Details									
Surname:				Given nam	ne(s):				
Date of birth:	Home phone number:		Mobile pho	Mobile phone number:		Email add	Email address:		
Address:	I				Suburb: State:		State:		Postcode:
Next-of-kin:			Contact number:						
Medicare eligible: ☐ Yes ☐ No	Medicar	e number:				Reference:		Expiry date:	
Please advise all patients to brorovided which is payable on p									ts/ treatment
rivate health insurance:  Yes No	Fund na		noy manu	or must be pro	STIGOR DOTOTO D	Policy numb			
s the patient of Aboriginal or To			original an	d Torres Strait	Islander	No □ Not s	tated/unkno	own	
Vill the baby identify as Aborig									
nterpreter required:	Languag	ge:				Is the patier		backgro	und:
Special cares (e.g. carer):									
r. Sarah Janssens (Director hank you for seeing this patie NMP: EDC:			Parity:		Weight (kg):	Heig	ght (cm):	E	BMI:
High risk pregnancy details:									
Past genetic, medical, surgical,	and obstetric	history:							

mater health

Sex

ANTENATAL REFERRAL Fax number: (07) 3163 8053			DOB				
Allergies Name of medication/food/o	ther		Descri	ption of previous	s reaction		
Current Medications	Medication name Strength Dose		Moding	tion name	Strong	th Do	20
Medication name	Strength	Dose	Medica	tion name	Streng	th Dos	
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	-	-	_		_	-	linic
							al fo
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Models of Care	•		<u> </u>				and -
Preferred model of care if available:							ame
GP Shared Care: Yes No			I have completed the	e MMH alignment	program: Ye	s No	ndm
I have completed an alignment program wit	h the following hos	spital:			Date complete	<u>-</u>	lent:
		*33000					I I
Midwifery care: Yes No			Midwifery Group Pra	ctice: Yes	□No		All clinical form creation and amendments must be conducted through Health
Relevant Investigations (attach investigations)	tigations or results	)					oong
Pathology service provider: Mater F	athology S&	N QML	Other (specify):				ducte
Pap smear or cervical screening:		Yes N	lo Results:			Normal Ab	normal 4
			lo Testing accepted:			Yes	□No lo
Referral given:		☐ Yes ☐ N					3 5
First trimester HBA1c for BMI >30, previous			HIV:			Yes	□ No eat
maternal age >40, PCOS or previous macro	osomic baby:	Yes N	dyprillis scrology.			Yes	□ No R
18/40 morphology ultrasound ordered:		Yes N	Biood group and a				□ No log
FBC: Rubella serology:		Yes N	l-			Yes	□ No Ss
Urine M/C/S:		Yes N	nepalitis C seroio	gy:		☐ Yes	∐ No
			-				
Referring Doctor's Details (please co	omplete all fields c	learly or affix st					
Doctor's name:			Provider number:				
Practice address:			Suburb:		State:	Postcode	5
Phone number: Fa	ax number:		Email signature:		1	-	
Mater Staff Use Only							
Date received: A	ge:		EDC:		Current gestati	on:	
Referral accepted Referral decline	d Other (spe	cify):	1			Out	of area
GP notified Date notified:	Womar	notified - Date	e notified:				
First appointment midwife and obstetrici	an		☐ Woman notified o	f date of first appo	ointment:		
Medicare eligible Medicare ineligib	le AND insured	Medicare in	eligible and NOT insured	Date sent t	to billing office:		
Notes:							
Midwife (print name):			Signature:			Date:	

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## <sup>†</sup>mater

# Please attach copy AND cc MMH

Relevant investigations (attach	invest	igation	s or results)		
Pathology service provider			~	Pathology (	Service
Pap smear or cervical screening?	<b>O</b> Yes	ONo	Results?	ONormal	OAbnormal
Screening for fetal anomalies discussed?	OYes	ONo	Testing accepted?	OYes	ONo
Referral given?	<b>O</b> Yes	ONo			
First trimester HBA1c for BMI >30, previous	us GDM,	maternal a	age >40, PCOS or previous macrosomic baby?	OYes	ONo
18/40 morphology ultrasound ordered?	OYes	ONo	FBC?	OYes	ONo
Rubella serology?	OYes	ONo	Urine M/C/S?	OYes	ONo
HIV?	OYes	ONo	Syphilis serology?	OYes	ONo
Blood group & antibody?	<b>O</b> Yes	ONo	Hepatitis B serology?	<b>O</b> Yes	ONo
Hepatitis C serology?	<b>O</b> Yes	ONo			

Copy of results in referral = helpful for triage cc results to MMH

Printed copy of reports in the Pregnancy Health Record OR copied to My Health Record = immediate access to clinical information

Press print!



- Low risk women <u>must</u>
   complete information online
   <u>before</u> their antenatal
   booking appointment or it will
   be rescheduled
- A link is sent via SMS
   Mobile number must be
   correct
   (women to notify ANC of any contact changes)
- If unable to be contacted their booking will be cancelled
- Women who need an interpreter have a longer booking appointment, not the online version. Identify them!

# Who is responsible for results?

### You

If you order it, you are responsible for follow up and referrals

- The cc result is not seen by clinicians until contact with the woman is made
- What do you do with what you have found is in the MMH GP Maternity Shared Care <u>Guideline</u>
- ➤ Unsure? Who can you call?

# Who can I call?

## For clinical advice or if a woman requires urgent review:

> Obstetric consultant:

M-F 8.30-4.30 3163 1330

24hrs 3163 6612

- ➤ Obstetric /Gynae Reg: 3163 6611 (24hrs)
- ➤ Obstetric Medicine Reg: via switch 3163 8111
- Pharmacy / Medication queries: 3163 8226 / medicinesinfo@mater.org.au

#### The GP Liaison office

Mon - Fri 0730 - 1600 for all your questions

Telephone 07 3163 1861 mobile 0466 205 710 (you can leave a message) or



# Referral process

- what to do with what you know
- what to do with what you find

- ➤ Women with *pre-existing* medical conditions identified in the antenatal referral don't need separate referrals to specialist clinics. The obstetrician will sort it out at the first visit.
- ➤ If a woman develops a complication after referral, notify ANC with correspondence and results (Fax 3163 8053 or send electronically); a new referral is not required.
- ➤ OGTT positive? Notify ANC ASAP

  If immediate referral is needed,
  refer the woman to PAC (24/7)

- ➤ All women should be referred to their local obstetric hospital
- ➤ A comprehensive referral ensures appropriate triage
- Local obstetricians will liaise with or refer women onto MMH prn
- If complications arise, contact the *local* obstetric service, they can sort it out

## www.materonline.org.au



### **GP Maternity Shared Care**



#### Maternity shared care alignment

Women wishing to attend the Mater Mothers' Hospital (MMH) for their care during pregnancy and in childbirth have an option of GP shared care, which means most of their antenatal appointments are managed by their General Practitioner (GP).

While it is not essential to hold additional qualifications in Obstetrics and Gynaecology, the GP should have adequate knowledge and skill in obstetric care and be familiar with the policies of MMH. GPs undertaking maternity shared care are expected to meet the alignment requirements for maternity shared care.

Shared care automatically implies that the responsibility for the health of the woman and her baby is shared. A referral to Dr Sarah Janssens, the Director of Obstetrics and Gynaecology at Mater Mothers' Hospital, should be submitted before 12 weeks' gestation whenever possible.

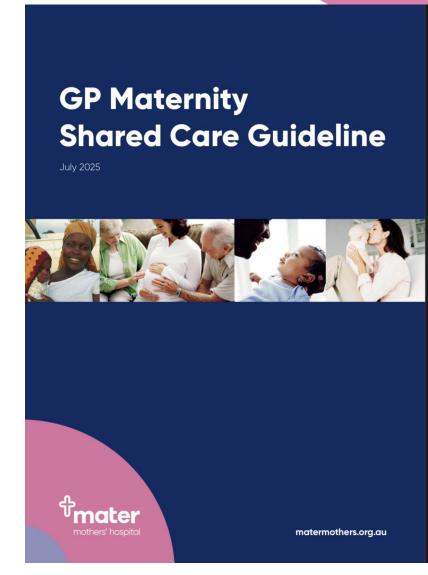
**View GP Maternity Shared Care guidelines** 

### **GP Maternity Shared Care Guideline**



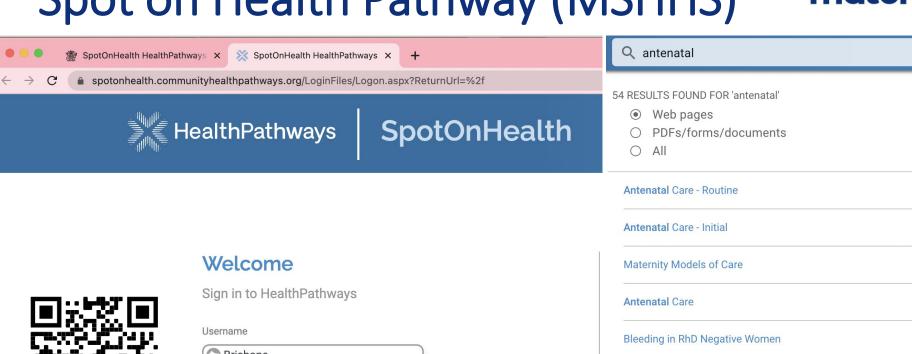
This is a 62 page summary of essential principles underlying GP maternity shared care.





### Spot on Health Pathway (MSHHS)







Username	
© Brisbane	
Password	Forgot passwo
South	Show

Venous Thromboembolism (VTE) Risk in Pregnancy Perinatal Mental Illness Acute Obstetric and Maternity Assessment **Pregnancy Planning** Sexual Health Check Plagiocephaly Acute Paediatric Surgery Assessment

Mater Doctor Portal

**MMH Alignment Program** Creative Commons Attribution-ShareAlike 4 International License

#### **Brisbane South Antenatal Shared Care**

### mothers' hospital





#### **Process**

#### **Pre-Conception** Unique role for GPs!

- Folate and iodine supplementation for all
- Rubella serology +/vaccination
- Varicella serology if no history +/- vaccination
- Influenza Vaccination in season + and COVID (follow current guidelines)
- · Cervical screening if due
- Chlamydia test/treat <30yrs</li>
- Smoking cessation
- Alcohol cessation
- Discuss and offer reproductive carrier screening e.g., CF, SMA & FXS (or extended panel)
- · Consider referral to preconception clinic e.g., Mater, Logan Prepregnancy assessment.

#### First GP Visit(s)

#### (May take more than one consultation)

- Confirm pregnancy & dates. Scan after 7/40
- Scan if dates uncertain or risk of ectopic (previous ectopic, tubal surgery) or previous pregnancy complications/medical risks
- Folate and iodine supplementation for all
- · Review medical, surgical, psych, family history, medications, allergies etc.- update GP records ± create My Health Record shared health summary.
- Identify risk factors for pregnancy.
- Discuss and offer genetic carrier testing, anomaly screening +/- NIPT.
- BP, weigh, calculate BMI, physical examination.
- Discuss smoking, nutrition, alcohol, physical activity; dietary advice (listeria) & drug avoidance; Assess emotional well-being and screen for DFV if safe to do so.
- Consider early Aspirin use if risk factors for pre-eclampsia/IUGR - before 16 weeks (see over)
- Offer influenza and COVID (follow current) quidelines) vaccination as soon as practical.
- Discuss models of care

#### **First Trimester Screening Tests** (cc. ANC on all request forms) - all requested tests to be reviewed and actioned by referring clinician.

- FBC, Ferritin, blood group and antibodies, rubella, Hep BsAg, Hep C, HIV, syphilis serology, MSU (treat asymptomatic bacteriuria)
- Discuss and offer Genetic Carrier Screening to ALL
- Discuss and offer screening for anomalies in ALL:
- 1. Nuchal Translucency Scan + First Trimester Screen (free ßhCG, PAPPA) K11-13+6 OR
- 2. Non-Invasive Prenatal Testing > K9 (Higher failure rate in multiple pregnancy, not Medicare funded, first trimester scan recommended) OR
- 3. Triple Test (AFP, Oestriol, hCG) K15-22 if too late for first TM testing. Not if twins or diabetes Discuss/ offer CVS/Amniocentesis if appropriate.
- Order Rhesus-D NIPT of Rh Negative nonalloimmunised patients (timing is lab dependent.)
- Cervical screening test if due, Dry swab (PCR) if lesions/chancre present.
- Varicella serology (if no varicella history /vaccination)
- OGTT after K12 (or HbA1c) if high risk for Diabetes (see box below)
- ELFT, TFTs, Vit D, chlamydia/gonorrhoea only recommended for at risk women (see over)

#### Uncomplicated pregnancy

- Refer privately for detailed scan (placenta, morphology, cervical length) at 18-20 weeks.
- First Midwifery Booking visit at 14-16/40 with medical visit at 14-20/40 (18-20/40 combined RM/doctor visit MMH)
- You are responsible for her care until she is seen by the hospital, after which the responsibility is shared.
- GP visits to be scheduled around hospital appointments to ensure timely review of results.
- All investigations to be reviewed by referring clinician and required follow up arranged or referrals made.

#### GP Visits: 14, 24, 28, 31, 34, 38, 40 weeks

(More frequent if clinically indicated)

- Record or place printed copy of notes/ results in Pregnancy Health Record (PHR)
- Schedule, education, and assessment as per the PHR
- K26-28 GTT, FBC, Ferritin, Blood group and antibody screen, Syphilis Serology
- Syphilis PCR (dry swab) anytime as clinically indicated).
- K36 Hb. (Ferritin if indicated). Syphilis serology)
- Vaccinations: Offer influenza & COVID (any time); pertussis at K20-32 in each pregnancy & Abrysvo (RSV) between 28-36 weeks gestation.
- ANC review at K36 and at K40-41

On-Call

Obstetrician

3488 3111

Version: July 2025

Pregnancy

Assessment

Centre (PAC)

3163 6577

#### High Diabetes in Pregnancy Risk Please specify reason and include copy of results in referral.

- Previous GDM or baby > 4500g, PCOS, strong family hx. BMI > 30, maternal age ≥ 40, previous unexplained perinatal loss; multiple preg, high risk ethnicity, glycosuria: assisted reproduction: Medications - steroids, antipsychotics
- HbA1c up to 12/40 if early screening indicated, Consider OGTT at >10/40 as clinically indicated & patient tolerated. Avoid OGTT in post bariatric surgery patients.
- URGENT Hospital ANC referral if GDM = HbA1c 6-6.4%: Fasting ≥ 5.3 -6.9 mmol or 1-hr ≥ 10.6 or 2-hr 9-11 OR OVERT DIP = HbA1c ≥ 6.5%; Fasting ≥ 7.0 mmol or 2-hr ≥ 11.1%

#### **Medical or Obstetric** Complications? EARLY or **URGENT ANC referral:**

- GP referral letters are triaged by MW or consultant within same week.
- Please specify urgency and reasons in the referral letter
- Refer to local service will liaise or make further referrals if required.
- Be sure to cc pathology and radiology and give women a copy of their results.
- Cervical length < 35mm transabdo</li> USS - arrange TVS; If < 25mm (TVS) commence 200mg vaginal progesterone daily: If < 10mm. URGENT referral? cerclage

#### **Rh Neg Mothers** with unknown or positive fetal Rh status

- Antibody negative. offer 625 IU anti-D at 28 & 34 weeks' and for sensitisng events.
- Dose can be given at local Hospital. OR GP-order via QML or Mater Blood Bank, delivered via courier to surgery.
  - QML 3371 9029
  - Mater 3163 8179
- AntiD not indicated for threatened miscarriage ≤ 12/40 (or ToP  $\leq 10/40$ )

CONTACTS	Beaudesert	Logan	Redland	Mater
Secure e-Referral	SMART Referrals or Medical Objects/Health Link			
	Central	Referral Hub: 1300	364 248	3163 8053
Updated information to be sent via Smart Referral or ANC Fax	5541 9132	3299 8202	3488 3436	3163 8053
ANC phone	5541 9144	2891 8527	3488 3434	3163 1861
Perinatal Mental Health Services	3089 2734	3089 2734	3825 6214	3163 7990
GP Liaison Midwife	0482 677 281 or GPLO GP- 2891 5754 316			3163 1861
For Urgent Referral or Advice				
O&G Registrar	-	2891 8027	3488 3758	3163 6611
Obstetrician/GP Obs on call	5541 9174	3089 6963	3488 3111	3163 6612
Triage Midwife	5541 9181	2891 8811	3488 3044	3163 1861
For urgent MH referral/advice	130	0 642255 (1300 MH	CALL) for all cent	res
Pregnancy Complications				
Complications e.g., bleeding, pain,		<14w 2891 8456		

On-Call GP

Obstetrician

5541 9174

>16w 2891 9060

**EPAU FAX** 

3089 2016

ED: 2891 8899

Modified by MSHHS and MMH from an original created by Drs Michael Rice, Mano Haran and Heng Tang

fetal movts. PHONE 24/7

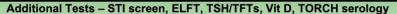
incomplete miscarriages, altered

Haemodynamically unstable

women? Direct to ED/PAC

#### **Additional Information and Advice**

## mater Metro South Health



- Chlamydia and Gonorrhoea --test women < 30 years old and other high-risk women by self-collect PCR swab.</li>
- ELFTs and urinary protein/creatinine ratio recommended for obese women (BMI > 30), hypertension or known or suspected renal or liver disease, autoimmune disease.
- Routine TFTs are not recommended in low-risk pregnant women. TSH generally drops in first trimester with the rise in HCG. If a woman has a TSH lower than the lab reference range, check free T4/T3—if these are normal, the woman does not need referral, if elevated, they will need clinical review, possibly referral liaise with your local team. <a href="https://metronorth.health.qld.gov.au/wp-content/uploads/2017/10/thyroid-disorders-pregnancy.pdf">https://metronorth.health.qld.gov.au/wp-content/uploads/2017/10/thyroid-disorders-pregnancy.pdf</a>
- Women with pre-existing hypothyroidism should have a TSH <2.5 in first trimester and <3.0 in the rest of the pregnancy. Lab reference ranges will
  reflect pregnancy recommendations if the woman is identified as being pregnant. Weekly doses usually need to increase by 30% during pregnancy,
  which is an extra 2 doses/week. Advise women to commence the higher dose as soon as they know they are pregnant.</li>
- Vitamin D levels or supplementation are recommended for obese or dark-skinned women or those with little sun exposure or who cover themselves
  for religious or cultural reasons. Levels <50 may require supplements of 2000 IU/day. Levels <15 require higher doses and re-test after 3 months.</li>
- Toxoplasma, cytomegalovirus, and herpes serology should not be performed routinely. If risk factors indicate a need for testing, please include risk in
  your referral as follow-up tests or other investigations or management may be needed.

#### **Nutrition and Supplements**

- Folate 0.5 mg for all low risk, 2.5-5 mg if high risk (diabetic, obese, previous, or familial neural tube defect, anticonvulsants). Start one month before conception & continue to 12 weeks.
- lodine 150mcg/day recommended preconception, during pregnancy and while breastfeeding (folate + iodine supplement is available)
- 2-3 serves daily of calcium-rich food/drink (1g/day) OR add 500mg minimum daily supplement. RANZCOG recommend universal 400IU/day Vitamin D (e.g., 600mg Ca + 1000IU Vit D)
- Iron only needed if deficiency is identified however low dose is included in all pregnancy supplements. Avoid Vit A in pregnancy.
- Added supplements needed for women post Bariatric Surgery (including Vitamin A) – seek Dietitian input.
- Avoid or limit intake of large/predatory fish due to mercury content (Orange Roughy /Sea Perch, Shark/Flake, Swordfish, Marlin etc.)

#### Early Low Dose Aspirin (100-150mg)

Commence before 16/40 (stop at 36/40) to reduce incidence of placental disorders such as Pre-eclampsia & fetal growth restriction (FGR), preterm birth & perinatal mortality in those at increased risk. Take in the evening.

High Risk Factors - recommend if patient has one or more of:

- Hypertension
- Renal disease
- Auto-immune diseases e.g., SLE or anti-phospholipid syndrome
- Diabetes (Type 1 or Type 2)
- Previous History of pre-eclampsia

Moderate Risk Factors - consider if two or more are present:

- Primiparous
- BMI > 35
- Age > 40
- Multiple pregnancy
- Family history of pre-eclampsia (mother or sister)
- More than 10 years since last pregnancy

#### **Preventing Infections**

- Toxoplasmosis Avoid feeding raw/undercooked meats to pets, avoid cat faeces/litter, wear gloves when gardening.
- Cytomegalovirus Good hand hygiene; Care with urine, saliva, nappies of young children
- Influenza and COVID Vaccination at any stage antenatally; pertussis vaccinations 20-32 weeks & RSV 28-36 weeks (but up to time of delivery if missed; requires two weeks to be fully effective)
- Listeriosis Avoid soft cheeses, un-pasteurised milk, pate, raw eggs, hot dogs, undercooked and deli meats, reheated leftovers, precut fruit, bean sprouts.

#### More Online Information and Education for GPs interested in Antenatal Care are available through:

- General Practice Liaison Officer (GPLO) Program webpage: https://metrosouth.health.qld.gov.au/referrals/general-practice-liaison-officer-gplo-program
- Mater Mothers <u>www.materonline.org.au</u> (Click on Shared Care Alignment for a range of resources for GPs) <u>www.matermothers.org.au</u> (Click on Mater Mothers' Hospital for resources for women)
- www.maternity-matters.com.au has consumer and clinician resources and links to reputable websites.

#### Early Pregnancy Complications (<20 weeks)

- Nausea and vomiting decrease iron (but continue iodine and folate), try ginger, acupressure, pyridoxine 75 mg/day in divided doses, doxylamine (Cat A) Metoclopramide (Maxolon Cat A) and Phenothiazines like Prochlorperazine (Stemetil Cat C, po/pr/iv, safe in first trimester); Ondansetron may be effective but is relatively expensive. Even mild dehydration/ketonuria may benefit from IV fluids.
- Bleeding: check blood group and antibodies. Threatened miscarriage in rhesus-negative women without antibodies (and unknown fetal Rh status) after 12 weeks requires anti-D, before 12 weeks anti-D is not required unless the miscarriage completes, or you are concerned the woman may not re-present.
- Bleeding and pain: consider ectopic pregnancy!
- Consider advice from, or referral to, early pregnancy assessment unit (EPAU), pregnancy assessment centre (PAC) or emergency department at booking hospital (appointments may be required)

Beaudesert 5541 9111; Logan EPAU (< K14) 3299 8456 Redlands 3488 3111: Mater PAC 3163 6577

#### Late pregnancy complications (>20 weeks)

- Bleeding can do spec exam but avoid PVE. Exclude cervical dilatation. Re-check placental site on original morphology scan, Rhesus neg mothers (with unknown fetal Rh Status) need anti-D.
- Abdominal pain can do spec exam but no PVE. Exclude cervical dilatation.
- Ruptured membranes Review at hospital preferred. Can do spec exam but no PVE.
- Fundal height > 3cm above or below expected for gestational age arrange USS & if IUGR confirmed, refer to ANC by Fax and Phone Obstetrician/Registrar; if LGA confirmed, refer back through ANC
- Perceived change in fetal movements beyond 28 weeks or no FH detected – arrange IMMEDIATE hospital review.
- Most should be referred to booking hospital birth suites, pregnancy/maternity assessment/observation units or Emerg. Dept.

Beaudesert 5541 9111; Logan MAC 2891 8811 Redlands 3488 3111; Mater PAC 3163 6577

For feedback on this document, please email MSHHS GPLO Maternity Team at GPLO Maternity Share Care@health.qld.gov.au

Modified by MSHHS and MMH from an original created by Drs Michael Rice, Mano Haran and Heng Tang. Edited and updated by Drs Kim Nolan, Margaret Robin and Michael Rice – July 2025 <a href="https://www.materonline.org.au">www.materonline.org.au</a> | <a href="https://www.materonline.org.au">www.https://www.materonline.org.au</a> | <a href="https://www.materonline.org.au">www.materonline.org.au</a> | <a href="





# QR Code for MSH GP Shared Care 2-pager



## Guidelines-State (Qld)





Home > Queensland Clinical Guidelines

#### **Queensland Clinical Guidelines**

Translating evidence into best clinical practice



Maternity & Neonatal	NeoMedQ	Adult Diabetes
Clinical guidelines and supporting resources	Search the Queensland Neonatal Medicines Formulary.	Adult inpatient management of steroid induced hyperglycaemia
Maternity		Guideline
Neonatal		<ul> <li>Supplement</li> </ul>
Standard care		
<ul> <li>Operational frameworks</li> </ul>		

Consumers	Additional Guidance	Learning and Resources
Information for women, parents and carers	Guidelines developed by others  • Maternity guidelines	Education and implementation resources
<ul> <li>Consumer information</li> <li>Consumer representation</li> </ul>	Neonatal guidelines	<ul><li>Presentations</li><li>Knowledge assessments</li><li>Videos</li><li>Implementation checklist</li></ul>

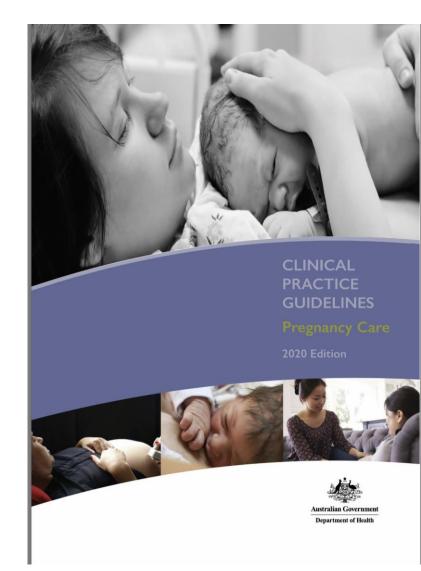


### **Guidelines-National**



https://www.health.gov.au/resources/publications/pregnancy-care-guidelines

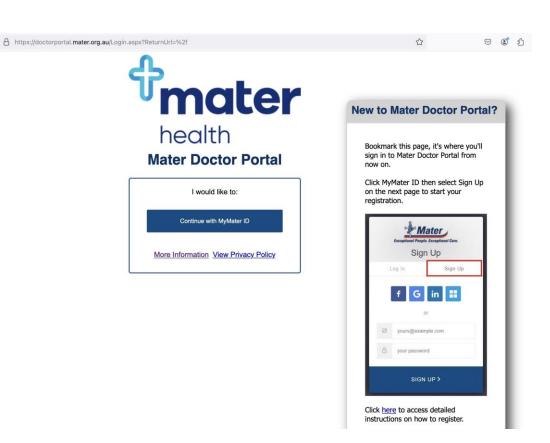








Mater's version of the Health Provider Portal



Interested? Register via Mater Online



## Please consider signing up

Mater has a consumer website www.matermothers.org.au with models of care information

Women who do not have a GP can use this list to locate an aligned GP

Indicate your interest and consent on the feedback form

 West End Waterford West Underwood Toombul • The Gap Sunnybank Hills Stones Corner Springwood Slacks Creek Seven Hills Runcorn • Rocklea Redbank Plains Purga Paddington Norman Park Nathan Mount Warren Park Morningside Meadowbrook Mansfield Macleay Island Laidlev • Keperra Jindalee Indooroopilly Holland Park Greenslopes Goodna Eight Mile Plains • Eagle Heights Darra Cornubia Cleveland Capalaba Buranda Brookwater Bracken Ridge Belmont

Auchenflower

Acacia Ridge

Annerley

 Yeronga Yeppoon Yarrabilba Wynnum Woolloongabba Woodridge Wishart Windsor Windaroo Wellington Point Wellers Hill Victoria Point Upper Mt Gravatt Toowoomba Toowong Tingalpa Thornlands Tenneriffe Taringa Sunnybank Sumner Park St Lucia Springfield Lakes Springfield Southport South Brisbane Sherwood Sinnamon Park • Samford Salisbury Rochedale Robertson • Richlands Redland Bay Redbank Red Hill Parkinson Park Ridge Oxley Nundah Newmarket New Farm Murrumba Downs Mt Gravatt Mount Ommaney Mount Cotton Middle Park Moorooka Marsden McDowall Manly West Manly Loganlea Loganholme Kuraby Kingston Kenmore Kangaroo Point Jimboomba Ipswich Inala Holmview Hillcrest • Highgate Hill Hawthorne Gumdale Greenbank Graceville Fortitude Valley Forest Lake Fairfield Everton Hills East Brisbane Eagleby Durack Dunwich Daisy Hill Crestmead Coorparoo Collingwood Park Carindale Carina Cannon Hill Camp Hill Burleigh Waters Burpengary Browns Plains Bulimba Brookfield Brisbane CBD Bowen Hills Birkdale Beenleigh Beaudesert Bardon Balmoral Bald Hills

Ashgrove

Algester

Ascot

Albany Creek



# What's new in Perinatal Care?

Dr Maggie Robin

### What's new...



### Medicare funding for Carrier Status testing

Since Nov 1, 2023

Spinal Muscular Atrophy Cystic Fibrosis Fragile X Syndrome



### Medicare Criteria

- 1. Female planning pregnancy
- 2. Female who is already pregnant (best done 1)
- 3. Male reproductive partner of a female carrier

The rebate only applies ONCE per lifetime

1 in 20 is the combined carrier frequency for these three conditions

### What's new...



### NIPT for Rh factor

- Fetal Rhesus screening is now rebatable by Medicare (item #73430)
- Enables antenatal identification of fetal Rh status for Rh negative mothers
- May avoid unnecessary administration of anti-D when fetus is Rh negative
- Eligibility criteria:
  - >/= 11/40 at SNP, > /=15/40 at Mater Pathology
  - Rh negative mother
  - Antibody screen negative
  - (Alternative specialized screening is available for antibody positive / alloimmunised patients)

### What's new...



# Diagnostic criteria for GDM have changed as of 1<sup>st</sup> July 2025 (new ADIPS recommendation)

2014	HbA1c (%)	Fasting BGL (mmol/L)	1hr BGL	2hr BGL
GDM	5.9-6.4%	5.1-6.9	>/= 10	8.5-11
DIP	6.5%	>/= 7.0	No criteria	>/= 11.1
Targets	N/A	= 5.0</td <td><!--= 7.4</td--><td><!--= 6.7</td--></td></td>	= 7.4</td <td><!--= 6.7</td--></td>	= 6.7</td

2025	HbA1c (%)	Fasting BGL (mmol/L)	1hr BGL	2hr BGL
GDM	<b>6.0</b> -6.4%	<b>5.3</b> -6.9	>/= 10.6	9.0 -11
DIP	6.5%	>/= 7.0	No criteria	>/= 11.1
Targets	N/A	= 5.2</td <td><!--= 7.4</td--><td><!--= 6.7</td--></td></td>	= 7.4</td <td><!--= 6.7</td--></td>	= 6.7</td

#### What's new...



### RSV vaccination for mothers & babies



News | Thu, 20/02/2025

### NCIRS releases suite of new and updated RSV resources, as infant protection programs launched across Australia

The roll-out of the National RSV Mother & Infant Protection Program (RSV-MIPP), which commenced on 3 February 2025, is a major milestone in disease prevention in Australia – and NCIRS has released a wide variety of new and updated resources to support the new program.

The RSV-MIPP is now providing pregnant women across Australia with free access to the maternal respiratory syncytial virus (RSV) vaccine Abrysvo under the <u>National Immunisation Program</u> . The vaccine is offered to all pregnant women to protect their newborn infants and is <u>recommended</u> at 28–36 weeks gestation (though it can be given beyond 36 weeks gestation).

States and territories [PDF] will also offer nirsevimab (Beyfortus) free of charge to eligible infants as part of the program. Infants recommended to receive nirsevimab include babies born to mothers who did not receive RSV vaccine within two weeks of birth and infants at risk of severe disease from RSV infection.



### The impact of RSV vaccination...

### **Program outcomes**

**48% reduction** in RSV hospitalisations in infants under 6 months between 15 April and 31 December 2025 (vs. same period 2023)

73% reduction in RSV hospitalisations in infants under 6 months by 17 August 2025 (vs. same period 2023)

More than 1000 RSV hospitalisations prevented for infants under 6 months since the RSV program commenced in QLD

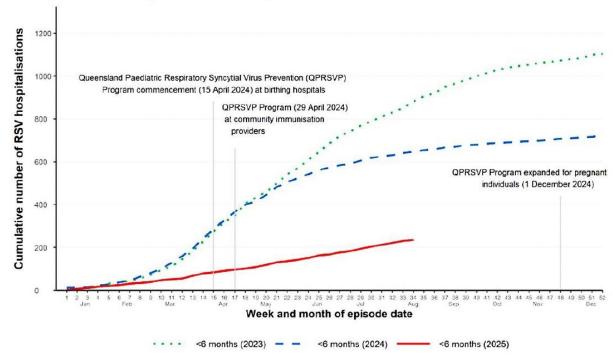


Figure 1: Cumulative RSV hospitalisation among infants aged <6 months, Queensland (1 Jan 2023 to 24 August 2025) Source - Queensland Acute Respiratory Infection Surveillance Report



# Pertussis & influenza vaccination

Pertussis (DTPa) ideally from 20-32 weeks, but funded up until birth

- If a woman has received DTPa before 20 weeks, it does not have to be repeated in the current pregnancy. The data shows transfer of antibodies as early as 13 weeks
- Recommend DTPa booster for all close contacts of baby (not funded however)

Influenza vaccine can be administered at any gestation and provides additional protection for the first six months of an infant's life

### What's new...

### Preterm birth prevention

### The key strategies to prevent preterm birth

### More than 26,000 Australian babies are born too soon each year.

New research discoveries have led to the development of key strategies to safely lower the rate of preterm birth and are continuing to make pregnancies safer for women and their babies.



No pregnancy to be ended until at least 39 weeks unless there is obstetric or medical justification.



Measurement of the length of the cervix at all midpregnancy scans.



Use of natural vaginal progesterone (200mg each evening) if the length of cervix is less than 25mm.



If the length of the cervix continues to shorten despite progesterone treatment, consider surgical cerclage.



Use of vaginal progesterone if you have a prior history of spontaneous preterm birth.



Women who smoke should be identified and offered Quitline support.



To access continuity of care from a known midwife during pregnancy where possible.



AUSTRALIAN
Preterm Birth
Prevention
ALLIANCE

These strategies have been approved and endorsed by the Australian Preterm Birth Prevention Alliance.



### Cervical length measurement (Point 2)



- Best efficacy between 16 and 24 weeks
- Offer transvaginal (TV) if significant Hx preterm birth/cervical surgery
- Otherwise, routine transabdominal (TA) screening at morphology
- Cut off TA: cervical length 35 mm (full bladder)
- TV if </= 35 mm TA or cervix cannot be seen across its entire length with certainty
- Cut off TV: </= 25 mm</li>
- Shortened cervix: urgent referral and commence natural vaginal Progesterone pessaries (200 mg nocte) the same day
- Note that there are different streamlined Authority numbers depending on brand of progesterone:
   Uterogestan = 11835, Oripro = 11675

### Point 3

Use of vaginal progesterone (200mg each evening) if the length of cervix is 25mm or less. This treatment should continue until 36 weeks gestation.

### Point 5

Vaginal progesterone 200mg pessaries are also to be prescribed for any case in which there is a history of spontaneous preterm birth in a previous pregnancy between 20 and 34 weeks gestation. The treatment is used each night from 16 to 36 weeks' gestation.





### What's new...



### PV Bleeding – PV Progesterone support?

### TGA approved (2022)

- "UTROGESTAN 200 mg (soft capsule) is now also indicated for treatment of unexplained threatened miscarriage in women with bleeding in the current pregnancy and a history of at least three or more previous miscarriages. Use in women with less than three miscarriages may be warranted in those with reduced chances of future pregnancy such as those undergoing IVF treatment with limited viable egg and/or embryo availability or advanced fertility age. However, the benefit of treatment in clinical trials was limited to women with three or more miscarriages"
- Note: not PBS listed for this indication
- PBS listed for IVF and preterm birth prevention (short cervix or history of spontaneous preterm birth, from 16 weeks)



Progesterone pessaries for threatened miscarriage

"The usual dose is 400 mg (two pessaries) twice a day (morning and night).

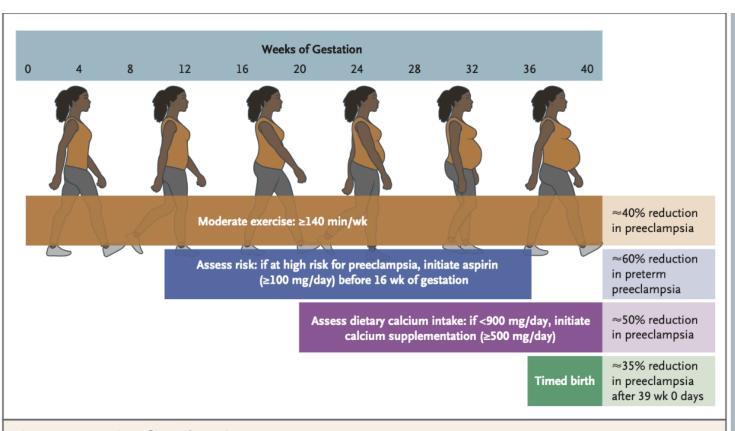
Treatment should be initiated at the first sign of vaginal bleeding during the first trimester of pregnancy and should continue to at least the sixteenth week of gestation."

Cost: \$91 (Chemist Warehouse) for 42 pessaries = ~ \$9/day for treatment



### What's new...

### Preeclampsia Prevention



#### Figure 2. Prevention of Preeclampsia.

Pregnant women should be encouraged to exercise to reduce the risk of preeclampsia and for general health. Before 16 weeks' gestation, women at high risk for preeclampsia should be identified and offered aspirin (≥100 mg per day). Women in low-calcium-intake populations should be offered supplemental calcium, at a dose of at least 500 mg per day, in the second half of pregnancy. Low-risk nulliparous women benefit from labor induction during the 39th week of gestation, between 39 weeks 0 days and 39 weeks 4 days of gestation.

### Prevention of Preeclampsia



Source: N Engl J Med 2022;386:1817-32.

DOI:

10.1056/NEJMra2109523

## Prophylactic aspirin use in pregnancy to reduce preeclampsia (PE) and intrauterine growth restriction (IUGR)



### 100 - 150 mg aspirin nocte

BEFORE 16 weeks gestation, ideally from 12 weeks, until birth



Source: AJGP October 2022

#### **High Risk Factors**

Women with any of the following:

- Hypertension
- Renal disease
- Auto-immune diseases such as SLE or anti-phospholipid syndrome
- Diabetes (Type 1 or Type 2)
- Past history of pre-eclampsia
- Assisted conception with oocyte donation

#### **Moderate Risk Factors**

Women with two or more of the following:

- Primiparous
- BMI > 35
- Age > 40
- Multiple pregnancy
- · Low socioeconomic status
- Personal history of low birth weight
- Previous adverse pregnancy outcomes
- Family history of pre-eclampsia (mother or sister)

#### What about calcium?

Calcium has been shown to reduce BP, relax smooth muscle, lower resistance in uterine and umbilical arteries. If a woman has deficient intake,  $\geq 0.5$  g/day is recommended



### 2023 SOMANZ Guideline

SOMANZ\* has a Hypertension in Pregnancy Guideline 2023 (published 05/02/24) and, in addition to the risk factors identified previously, a combined first trimester screen may be recommended. This screen uses a combination of maternal history, blood pressure, biochemistry (Papp-A or PLGF) and uterine artery doppler to improve the detection rate for early preeclampsia.

### **Executive Summary of Recommendations**

Part 2: Screening for women at risk of preeclampsia

Clinical question/ Location in Guideline	Type of Recommendation	Recommendation	Rating of Recommendation
2. Screening for women at risk of developing preeclampsia			
2.1	Evidence based recommendation	Women should be screened for their risk of preeclampsia early in the pregnancy.  At a minimum (in the absence of combined first trimester screening), risk stratification should be done based on maternal risk factors (maternal characteristics, medical and obstetric history) (Table 2.1).	1B
2.2	Evidence based recommendation	The use of a combined first trimester screen (combined maternal features, biomarkers and sonography) to identify women at risk of developing preeclampsia is conditionally recommended based on local availability and access to the required resources.	28

### Self-referral went live in Queensland from July 2025



## What does self-referral mean for primary care?



- The self-referral initiative was announced by Queensland's Chief Midwifery Officer Liz Wilkes in May 2025
- Borne out of research into adverse pregnancy outcomes which suggested that some vulnerable populations may have difficulty accessing timely pregnancy care and referral, due to social and financial disadvantage
- Provides pregnant people with the option of directly self-referring to a maternity hospital for antenatal care and delivery
- Mater remains committed to strong relationships between primary and hospital perinatal care
- All patients initiating self-referral are encouraged to engage with a GP in the first instance and are provided with details of Aligned GPs as appropriate
- Initial patient numbers via this pathway have been low, primarily patients with previous midwifery group practice (MGP) care, seeking MGP in a subsequent pregnancy





Delivered through a **hub and spoke model** with Mater Mothers' Hospital at South Brisbane serving as the central location for more complex care.

#### Models of care offered at Mater Mothers' Springfield include:



**GP Shared Care** 



Midwifery Group Practice (MGP)



Obstetric/Midwifery Care

16-bed inpatient ward

24/7 Pregnancy Assessment Centre

16-cot Neonatal Critical Care Unit

Antenatal clinic (opening December at Mater Health Hub, Springfield)



### Referrals are open!

Antenatal clinics open at Mater Health Hub, Springfield from December 2025. Mater Mothers' Springfield to open from late April 2026.

Mater-aligned GPs will be eligible to provide shared antenatal care for patients birthing at Springfield.



The immediate catchment area for Mater Mothers' Springfield includes the SA3 areas of:

- Springfield-Redbank
- Forest Lake-Oxley
- Centenary

#### Find updates here:



### What's new...

## Item numbers relevant to Maternity Shared Care



- **16500** (Rebate \$55) Antenatal Attendance
- **91853** (video: \$55) **91858** (telephone: \$55) equivalent of 16500
- **16591** (Rebate \$166.40) "Planning and management, by a practitioner, of a pregnancy if:
- (a) the pregnancy has progressed beyond 28 weeks gestation; and
- (b) the service includes a **mental health assessment (including** screening for drug and alcohol use and domestic violence) of the patient; and
- (c) a service to which item 16590\* applies is not provided in relation to the same pregnancy
  Payable once only for a pregnancy"
- (16590 = planning to undertake the delivery for a privately admitted patient)

## Additional item number for qualified GPs: 4001



Professional attendance of at least 20 minutes in duration at consulting rooms by a general practitioner who is registered with the Chief Executive Medicare as meeting the credentialing requirements for provision of this service for the purpose of providing non-directive pregnancy support counselling to a patient who:

- (a) is currently pregnant; or
- (b) has been pregnant in the 12 months preceding the provision of the first service to which this item or item 81000, 81005 or 81010 applies in relation to that pregnancy

Note: For items 81000, 81005 and 81010, see the determination about allied health services under subsection 3C(1) of the Act.

**Fee:** \$89.35

 Free online training available via RACGP and ACRRM, takes ~ 3 hours to complete

### Postnatal item numbers



### 16407

Postnatal professional attendance (other than a service to which any other item applies) if the attendance:

- (a) is by an obstetrician or general practitioner; and
- (b) is in hospital or at consulting rooms; and
- (c) is between 4 and 8 weeks after the birth; and
- (d) lasts at least 20 minutes; and
- (e) includes a mental health assessment (including screening for drug and alcoholuse and domestic violence) of the patient; and
- (f) is for a pregnancy in relation to which a service to which item 82140 applies is not provided (participating RM)
  Payable once only for a pregnancy

Fee: \$83.65

#### <u>16408</u>

Home visit for woman who was admitted privately for the birth. Midwife (on behalf of and under the supervision of the medical practitioner who attended the birth) Obstetrician or GP can claim. 1-4 weeks post partum, at least 20 min duration

Fee: \$62.30

Introducing

### Dr Georgia Heathcote

Dr Georgia Heathcote is an obstetrician & gynaecologist who treats women at all life stages.

As an obstetrician, Dr Heathcote enjoys supporting women and their families during pregnancy and delivery and strives to create a safe and empowering experience.

As a gynaecologist she treats a wide range of conditions affecting people across their life, including menstrual problems, cervical abnormalities and menopause.

Dr Heathcote adopts a trauma-informed approach and has a special interest in persistent pelvic pain.

Salmon Building, 537 Stanley St, South Brisbane Ph 07 3180 0048 Email: info@georgiaheathcote.com.au





### Early Pregnancy Loss

Dr Georgia Heathcote



### Definition & symptoms

- = loss of a pregnancy before 20 completed weeks' gestation
- Pregnancy loss may occur due to:
  - Miscarriage (10-20% of clinically diagnosed pregnancies end in miscarriage)
  - Ectopic pregnancy (1-2% of pregnancies)
  - Molar pregnancy (0.1% of pregnancies)
- Typical symptoms of early pregnancy loss:
  - Vaginal bleeding
  - Pain (abdominal, shoulder tip, lower back)
  - Vomiting
  - Dizziness / syncope
  - Passage of products of conception



## Approach to the patient with possible early pregnancy loss

Initial focused history: Pain / bleeding / syncope?

Assess vital signs, general appearance, severity / location of pain;

#### HAEMODYNAMICALLY STABLE? If unstable:

- Ddx: likely ruptured ectopic or incomplete miscarriage with severe haemorrhage
- Refer to hospital for urgent review
- Prior to transfer, consider:
  - Speculum exam if confident remove any products from cervical os
  - Resuscitative measures IV access, fluids / analgesia as appropriate, blood for urgent FBC, G&H, quantitative HCG;
  - o Empty the bladder
  - Keep NBM (may need urgent D&C or laparoscopy)

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## Most patients however, will be stable...

### If haemodynamically stable:

- Detailed history (obstetric and general)
- Physical examination
- FBC, G&H, quantitative HCG
- USS (transvaginal if possible)
- MSU if indicated
- STI screen if indicated
- GOAL: confirm cause of bleeding, location and viability of pregnancy
- Often can be done over several days in a community setting if minimal bleeding and mild pain only
- Your local EPAU can provide advice and support

### Early pregnancy loss - approach



## 1. Consider non-pregnancy related causes of bleeding

- Cervical ectropion / polyp
- Cervical dysplasia
- Infection (e.g. Chlamydia)
- Vaginal trauma
- Bleeding diathesis

### Early pregnancy loss - approach



### 2. Confirm pregnancy

- Notes on HCG:
- Serum hCG more sensitive than urine hCG in early pregnancy (ie, +ve just before or after missed period)
- Urine hCG

   Although less sensitive than serum, almost all pregnant people will have a positive urine hCG one week after the first day of a missed period
- Home pregnancy tests Accuracy of home tests is affected by the sensitivity of the specific test kit, as well as the user technique and interpretation. On the first day after a missed period, as many as 46% of pregnant people will have a negative home test.
- TIP: whole blood can be substituted for urine on an hCG cartridge with slightly higher sensitivity - wait 5 min for result
- +ve hCG confirms pregnancy but not viability, or location of pregnancy; only serial hCG & pelvic ultrasound determines viability & location
- Rare non-pregnancy cause of elevated hCG: germ cell tumours, in both female & male patients



### 3. Confirm location of the pregnancy

#### **POSSIBILITIES:**

- Intrauterine (IUP)
  - Viable (= "threatened" miscarriage)
  - o Non-viable
  - Uncertain viability
- Ectopic
- Pregnancy of unknown location (PUL)
- Transvaginal USS should show an IUP when HCG >/= 1500
- Transabdominal USS should show an IUP when HCG > ~ 5000

### Early pregnancy loss - approach

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## 4. Assess viability: What is a "Viable IUP"?

= Intrauterine gestational sac with fetal pole and fetal heartbeat (FHB), rate >/= 110 bpm

Often not reliably seen until 7/40 gestation

ASUM diagnostic criteria for non-viable IUP on TV USS:

- Mean sac diameter (MSD) >/= 25mm, no fetal pole
- Fetal pole with crown-rump length >/= 7mm, no FHB
- Absence of fetal pole with FHB >/= 2/52 after scan that showed a gestational sac without a yolk sac
- Absence of fetal pole with FHB >/= 11 days after a scan that showed a
  gestational sac with a yolk sac

If uncertain, serial HCG, and repeat USS in 7-14 days

### Serial hCG



- Request quantitative serum HCG, 48-72 hours apart
- In a viable IUP, HCG should rise by >/= 66% in 48 hours
- In a non-viable pregnancy (miscarriage or failing ectopic), HCG should fall by >/= 50% in 48 hours
- A sub-optimal rise (< 66%) or minimal fall (< 50%) should raise suspicion of ectopic pregnancy
- CAUTION: HCG peaks at 8-10/40 then plateaus and falls, therefore is not a useful prognosticator beyond this point

### A note on progesterone:

- Serum progesterone can be a useful indicator of early pregnancy location / viability
- Low progesterone (< 64 nmol / L) and particularly very low progesterone (< 15.9 nmol / L) is associated with non-viable pregnancy; i.e. only 0.3% of women with an early pregnancy progesterone of < 15.9 nmol / L had a viable IUP</li>
- Can improve the predictive accuracy of PUL calculation models
- Not a part of the Queensland Maternity Guidelines

### Serial ultrasound



- Ideally, transvaginal USS by the same, skilled provider
- Avoid re-scanning too early (leads to multiple unnecessary scans and patient anxiety)
- If initial HCG >/= 2000, repeat in 1 week
- If initial HCG < 2000, repeat in 2 weeks</li>
- To predict ideal USS interval:
  - Estimate when the MSD will be >/= 25mm (assuming 1mm growth / day)
  - o E.g. if MSD 12mm, repeat TV USS in 13 days



### Red flags

Strong pain unrelieved by simple analgesia (paracetamol / ibuprofen)

Shoulder-tip / diaphragmatic pain

Soaking a pad in < 60 minutes or passage of multiple large clots

Light-headedness / fainting

Symptoms of infection (fever / nausea & vomiting / sweats & chills / offensive PV loss)

PATIENT IS TO PRESENT TO THE EMERGENCY DEPARTMENT IF ANY OF THE ABOVE



### Non-viable pregnancy management options:

### 1. Expectant management

#### Successful in 85% of cases

#### Indications:

- Incomplete miscarriage
- Woman's preference
- Haemodynamically stable
- Access to urgent care and committed to follow up

### Management:

- Detailed history & examination
- Follow-up 14 days (phone or F2F) for convincing history of miscarriage
- Urine home pregnancy test 3 weeks post passage of products
- Repeat USS if persistent bleeding / pain / urine HCG remains positive

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### Non-viable pregnancy management options:

### 2. Medical management

85% successful with misoprostol alone, 95% with mifepristone / misoprostol (MS-2 Step)

#### Indications:

- Missed / incomplete miscarriage
- Woman's preference
- Haemodynamically stable
- Access to urgent care and committed to follow-up

Management (outpatient or day procedure):

- Day 1: mifepristone 200mg PO
- Day 2 (24 hours later): Quantitative hCG, misoprostol 400 mcg SL/PO/PV
- Day 3 (24 hours later): misoprostol 400 mcg SL/PO/PV
- Provide analgesia and anti-emetic
- Follow-up Day 3 and Day 9 (phone or F2F) (repeat quant HCG Day 9)
- Repeat USS if persistent bleeding / pain / HCG not fallen by >90%

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### **Early pregnancy loss**

### Non-viable pregnancy management options:

### 3. Surgical management

#### Successful in 95% of cases

#### Indications:

- Woman's preference
- Haemodynamically unstable
- Suspected infection
- Suspected molar pregnancy
- Unsuccessful expectant or medical management

### Management:

- Misoprostol for cervical priming
- Dilatation and curettage (usually day procedure)
- Antibiotics not routinely required
- Progress HCG / USS not routinely required (as indicated)
- Follow-up 7 days (phone or F2F)

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### Ectopic pregnancy

- = pregnancy outside of the uterus
- Tubal (most common)
- Ovarian
- Cornual
- Cervical
- Omental
- Caesarean scar
- Heterotopic pregnancy (IUP + ectopic) 1/1000
- $\sim$  1/50 pregnancies overall but  $\sim$  18% of women presenting to ED with first trimester bleeding and / or abdominal pain
- Cause: abnormal implantation of embryo due to tubal damage or decreased tubal motility (e.g. progesterone-based contraception)
- Potentially fatal due to rupture with catastrophic haemorrhage
- Typically presents at 6-10/40 with: abdominal pain (usually lateralising) / PV bleeding +/- signs of haemodynamic instability
- Signs: Abdominal tenderness +/- peritonism, adnexal tenderness +/- mass, cervical motion tenderness, shock



### Ectopic pregnancy management options:

### 1. Expectant management

#### Indications:

- Haemodynamically stable
- Access to urgent care and committed to follow-up
- HCG < 1500 and falling
- Ectopic < 3cm
- Pain-free and no clinical or sonographic evidence of rupture

### Management:

- Quantitative HCG every 48 hours for 8 days
- If falling appropriately, weekly HCG until negative
- Repeat USS if clinically indicated

### Ectopic pregnancy management options:

### ੀ mater

### 2. Medical management

#### Indications:

- Haemodynamically stable
- Access to urgent care and committed to follow-up
- Pain-free and no clinical or sonographic evidence of rupture

#### Caution:

 HCG > 5000 / Ectopic > 3cm / FHB present / Blood transfusion not an option

#### **Absolute contraindications:**

 Allergy / intolerance / contraindication to methotrexate / breastfeeding / heterotopic pregnancy

### Management:

- IM methotrexate if HCG </= 5000, IV if > 5000
- Serial HCG as per local protocol / MFM (follow down to negative)
- USS as clinically indicated (not usually necessary for IM MTX)
- Avoid conception for 4/12 (teratogenic)



# Ectopic pregnancy management options:

# 3. Surgical management

#### Indications:

- Haemodynamically unstable
- Clinical or sonographic signs of rupture
- Persistent excessive bleeding
- Heterotopic pregnancy
- Contraindications to other options

#### Management:

- Usually laparoscopy (with salpingostomy / salpingectomy)
- Laparotomy if unstable / difficult access
- hCG or Repeat USS only if clinically indicated

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# Molar pregnancy

1/750 pregnancies

#### 2 forms:

- 1. Benign
- 2. Malignant (gestational trophoblastic neoplasia)
  - o Intrauterine = invasive mole
  - Extrauterine = choriocarcinoma

Cause: Sperm enters an anucleate ovum & duplicates (46XX or 46XY) = complete (haploid) mole (90%), OR, 2 sperm enter 1 normal ovum (69XXX / 69XXY / 69XYY) = partial (triploid) mole (10%) – sometimes a fetus is present

Presentation: PV bleeding, sometimes trophoblastic ("grape-like") material; Large-for-dates, "doughy" uterus; Hyperemesis (due to abnormally high HCG)

Management: D&C; Chemotherapy for malignant disease

 Follow-up through the Molar Registry (Queensland Trophoblast Centre at RBWH)

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# General considerations

- Send products of conception for histopathology if practical
- RhD immunoglobulin for Rh negative women within 72 hours:
  - Singleton pregnancy up to 12+6/40: 250 IU IMI
  - Singleton pregnancy 13/40+, any multiple pregnancy: 625 IU
     IMI
  - No indication for threatened miscarriage (viable IUP)

#### Discuss:

- Expected symptoms
- Red flags
- Conception interval (no issues after miscarriage, ensure radiological resolution after conservative or medical ectopic treatment, when hCG has been 0 for > 6/12 after molar pregnancy)
- Future wishes around pregnancies / contraception

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# General considerations

#### Acknowledge grief and mourning

- offer links to resources e.g.
  - SANDS
  - The Pink Elephant support group: <a href="https://www.pinkelephants.org.au/">https://www.pinkelephants.org.au/</a> (online peer support, chat room and information)
- Medicare funds non-directive counselling item numbers for women who have been pregnant in the past 12 months (item # 4001 for GPs with appropriate training through RACGP or ACRRM; 3 hours free online module "Non-directive pregnancy counselling", rebate = \$87.25)

# Consider referral / investigations in recurrent (>/= 3 episodes) early pregnancy loss

#### Prepare for the next pregnancy:

- Encourage reduction / cessation of smoking, alcohol, and recreational drugs
- Encourage weight loss for those with elevated BMI
- Optimise any chronic medical conditions
- Women with a previous ectopic have a 10% risk of future ectopic should have an USS ~ 6/40 in any future pregnancy

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# When referring women to EPAU:

## Communicate, communicate, communicate!

- Please fax or email pathology / USS results:
  - Fax: 31636120; Email <a href="mailto:Epa1.mh@mater.org.au">Epa1.mh@mater.org.au</a>
  - MMH EPAU is attended 6 days / week
  - EPAU are also happy to field non-urgent clinical queries by email

# **Manage expectations**

- There may be a wait to be seen
- Stable patients requesting / requiring surgical management may not receive surgery at their first presentation

Thank you... Questions?



# Perinatal Loss and Caring for Grieving Families Presented by Shannon Shorthouse

Clinical Midwife, Mater Mothers' Perinatal Loss Team



# Mater Mother's Perinatal Loss Service

# Our service provides a dignified, respectful and compassionate delivery of care to Bereaved families

- Over 200 families each year
- All families experiencing the death of a baby during pregnancy or after birth from 12 weeks if admitted to the hospital
- 5 clinical midwives in our team covering 6 days a week







A perinatal death in Queensland is defined as; the birth of a baby of 20 weeks gestation or more, that is stillborn, or a baby that is born alive at any gestation and dies within the first 28 days of life.

This includes stillborn babies under 20 weeks gestation if 400 grams or more in birthweight.

This is classified for data collection and legislative requirements as a "registerable death"

#### **Antenatal Contact**

- Time of Diagnosis
- Emotional Support Logistical discussions (all very patient/family dependent)

#### W eeks/D ays prior to birth

#### **Time of Delivery**

- Support during/after delivery - Memory Creation
  - Revisit any concerns or questions
- Support cultural needs; i.e. muslim funeral planning, religious needs etc.

#### **Birth Suite/Ward/NICU**

#### **Ongoing Care**

At a minimum we have daily interactions with the patient/family. Checking in and evaluating their needs individually

## **Inpatient Ward**

#### **Outpatient Support**

- Team continues to stay in contact with family via phone, SMS or returned visits (if in NICU or needing face to face support)
- Facilitate viewings as required - Telehealth check-in after discharae
- Families are contacted weekly then fortnightly up to 4-6 weeks postnatally. Individualised to patients needs.

#### **Outpatient**

#### **Bereavement Follow Up** Appt

- Conducted 8-10 weeks after discharge
- Lead by Bereavement team and consultant involved in their care + and additional MDT members

## **Outpatient**

12 Month **Anniversary** Card

# Discharge Planning/Ongoing Support

- Logistics around supporting the family to discharge, i.e. avoiding main entrances and busy times of the day
- customising a follow up plan with the family and further GP contact
- Assist with plans for autopsy and funeral company contact

#### **Inpatient/Outpatient**









10 - 12 weeks











# Best Practice in delivering bereavement care



**Good Communication**; is empathetic, compassionate and easy to understand.

Shared decision-making; clinicians and patients consider best available options together to come to a decision.

Recognition of parenthood; approaches to care practices that respect all babies and identify parenthood throughout the journey.

Effective support; addresses the psychological, physical and practical needs of the parents and families in the immediate and longer term.



REF:Boyle, Horey, Middleton & Flenady (2019)



# Caring for a Family after deciding on Fetocide

Various reasons could contribute to the decision for a feticide; fetal abnormalities (genetic or structural), maternal risks or poor prognosis and social reasons.

Parents often struggle to allow themselves the same experience that those who have an unexpected IUFD do.

One can assume this is related to the fact that the family has had to make the traumatic decision to end the pregnancy.

# Guilt

What if the diagnosis was wrong?

Honoring their baby and Memory Creation

Autopsy to confirm diagnosis

**Involving family** 

Earlier discharges & Less time with their baby/babies



# Subsequent pregnancy care

#### Issues:

- Emotionally challenging expect increased anxiety and fear
- Guarded emotions not allowing themselves to feel joy
- Resurgent grief
- Attachment concerns
- Recommendations:
- Additional support (antenatal visits) and reassurance
- Referral for psychological counselling (individual/couples) if concerns for mental well-being
- Refer early, aiming for continuity of care





# Thank You



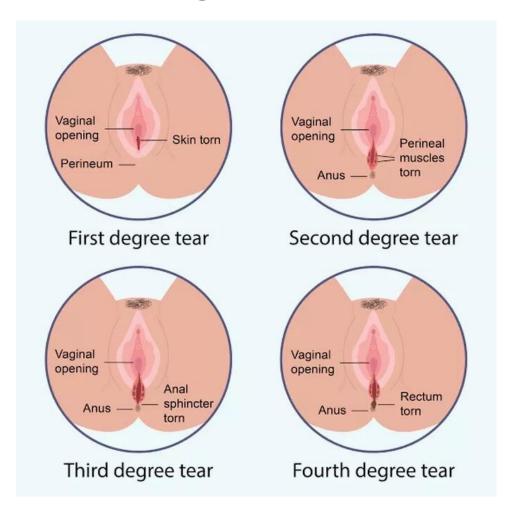
# Physical Birth Trauma

Dr Georgia Heathcote
Consultant Obstetrician & Gynaecologist

Sarah Moore
Physiotherapist
Mater Mothers Hospital



# Perineal trauma Dr Georgia Heathcote







# Postnatal Physiotherapy Following Perineal Trauma

Sarah Moore MWPH Physiotherapy Team

materhealth.org.au

# Prevention – Background Info



#### **Pelvic Floor Dimensions** and **Function**



- Maternal pushing must be associated with effective pelvic floor muscle relaxation for vaginal birth
- Many options for antenatal assessment: internal vaginal examination, ultrasound assessment
- Most effective and reliable: transperineal ultrasound

#### **Pelvic Floor Injury**

- Levator Ani Muscle Injury
- Obstetric Anal Sphincter Injury
  - Asian ethnicity
  - <160cm</p>
  - Instrumental delivery
  - Prolonged 2<sup>nd</sup> stage
  - Large baby

#### **Birthing Trauma**



Mental ill-health post birth is associated with pelvic floor symptom severity 1 year post birth:

- 30% SUI
- 50% prolapse
- 70% pelvic or low back pain

#### **FINDINGS**:

(Xodo et al 2023, Youseff et al 2021)

- Small levator hiatal area
- Co-activation of the pelvic floor on Valsalva
- delivery (Xodo et al 2023)
- 5x more likely to sustain 3<sup>rd</sup> or 4th degree tear (Xodo et al 2023)
- Increased duration of second stage

 3x more likely to have operative or instrumental



**Labour Outcomes** 



# Prevention Antenatal group class: Prep2Push



#### Setting:

- Public: small group
- Private: 1:1 in Health and Wellness Clinic

#### **Session Focus:**

- Positions for labour including using the birth ball
- Pelvic floor coordination and relaxation practice
- · Education on perineal tearing
- Perineal massage and preparing the pelvic floor throughout pregnancy
- Breathing and mindfulness strategies
- Enhancing self-compassion

#### Who is the most at risk?

- Women <160cm in height
- South-East Asian background
- Women with large gestational size relative to their height
- History of painful intercourse or pelvic pain including endometriosis
- History of trauma

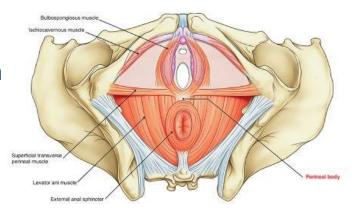


# Management: Inpatient Physio Treatment



# Days 0-5 post birth (in hospital)

- Early intervention for pain management
  - Rest positions, part of active recovery
  - Ice perineal icepacks
  - 'Compression' via gentle PF muscle activation
  - Consent for perineal observation to assess
     PF activation
- Movement patterns through side-lying
- Advice on comfortable seating
- Bladder health sensation/continence/emptying
- Bowel health positioning on toilet: posture, relaxation/strain reduction, aperient use, control



# Outpatient Physiotherapy Treatment



# Ongoing care for OASI and forceps deliveries

- 1. Phone call at ~10/7 PN
- 2. Face-to-face, 1 hour appointment

# Follow up phone call to all forceps deliveries and 3rd/4th degree tears

- Bowel health: advice on aperient use, continence control
- Bladder health: continence, emptying and storage
- Pain: positioning, rest, encourage GP or PAC F/U if indicated
- MSK advice
- Confirm 6 weeks PT OPD appointment for OASI patients



# Outpatient Physiotherapy



# Treatment

# OASI – 6 week follow up

1 Hour, Face-to-face, individual appointment

- Subjective:
- Peri healing pain, concerns
- Bladder Fx frequency/ control/ continence/ emptying
- Bowel Fx constipation / frequency / stool type / pain
- / hemorrhoids/ control (flatus and faeces)
- POP symptoms
- Returned to Intercourse
- Exercise:
  - o Current
  - o PFM ex's
  - Goals for future

- Objective:
- Vaginal exam
  - Scar tissue healing
  - Muscle function
  - Strength (superficial and deep)
  - Muscle endurance
  - Muscle coordination
  - Vaginal wall laxity

#### - Rectal exam

- Hemorrhoids, fissures, closure pressure
- o Tone
- Muscle strength
- Muscle endurance
- Coordination



# Outpatient Physiotherapy Treatment



# OASI – 6 week follow up

#### **Common treatments include:**

- PFM retraining and exercise program
- Bladder health advice and strategies
- Bowel health advice and strategies
  - Stool manipulation, toilet posture, defecation muscle coordination
- Peri scar massage
- Pessary after ~3/12 if indicated
  - For ongoing POP or SUI
- Return to exercise advice + individualised



# Outpatient Physiotherapy Treatment A quick note on **Birth Trauma**



It is usually at the start of a vaginal exam that patients will say things like:

- "oh, it's a mess down there!"
- "I haven't looked down there since the birth because I'm just too scared"
- "does it look normal?"

Common **body language** despite informed consent and reassurance:

- Tension through their hips, pelvic, back and legs
- Jumping or constriction with initial palpation
- Anxiousness and apprehension towards the exam

Overwhelm, crying and anxiety is not uncommon.

When this occurs we either pause or cease the exam, cover pts up and allow them the chance to explore their emotions.

# Women identify their birth as being traumatic

#### birthtrauma

#### Common Qs I ask:

- How do you feel about your birth?
- Do you understand why they did x? (epis, VE, NBF, emCS etc...)

This is usually where we acknowledge their feelings and let them know there is support and refer to MMH Parent Support Centre

# How to ask about symptoms



It is important to gain **comprehensive and accurate** subjective assessment. You can't treat or refer for treatment about symptoms you're unaware of...

Asking: 'do you have any concerns with your bladder?' is not specific enough

Asking: 'can you control your bowel motions?' does not gain a full picture of someone's anorectal control

#### **Examples:**

- Before I ask specific pelvic health questions, do you have any concerns?
- It is not uncommon to have difficulty controlling the need to pass urine..... // Urgency
- It is not uncommon to have accidental loss of urine when you cough or sneeze.... // SUI
- It is not uncommon to have difficulty controlling flatus... // Flatal Incontinence
- Do you pass wind without meaning to? // Flatal Incontinence
- Do you have any accidental skid marks in your undies?

#### // anal fecal incontinence

- Do you have any sensation of heaviness or pressure in your vagina? // POP
- When you wipe, have you felt any protruding tissue at your vaginal opening? // POP
- Are you very hesitant about returning to intercourse? Why?



# Who to refer to Physiotherapy



- Patients with concerns regarding control over bladder or bowel – incontinence of urine, faeces or flatus
- Patients with symptoms of prolapse vaginal heaviness, touching or feeling something at the vaginal entrance
- Patients reporting perineal scar pain
- Patients reporting pain with intercourse likely increased pelvic floor muscle tone or sensitized scar tissue

Refer to Urology if nil or decreased sensation to pass urine



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Thank you... Questions?



# Trauma-informed Care

Dr Maggie Robin – A birth story

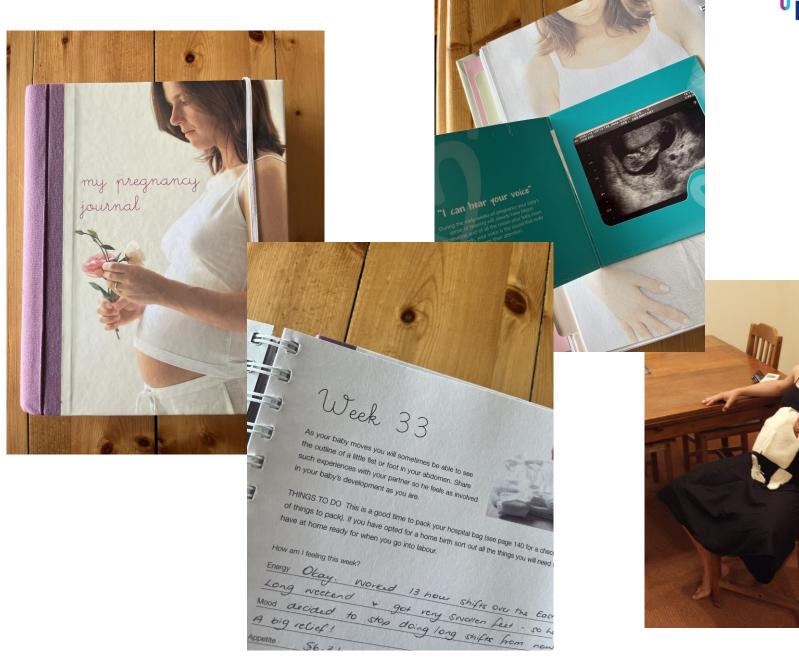
Dr Georgia Heathcote

Consultant Obstetrician & Gynaecologist

# A birth story...







Record of my labour		=
My labour started at	on	ACTOR NO.
went into hospital at	on	=
went to hospital by		
When I arrived at the hospital I		
Hylanda Santa		
How I felt at this stage		
		-
		-
		-
My baby was delivered at	on	
I was in labour for hour	s minutes	AND DESCRIPTION OF THE PARTY OF

# Antenatal experiences













# Labour...

"Well okay...

If that's how you want this to go."



# Labour...

<sup>†</sup>mater

- Epidural
- ARM, IV oxytocin augmentation
- Slow progress over 9 hours to fully dilated
- Pushed 2.5 hours
- Deflexed OP
- Trial of instrumental delivery in theatre, CS if unsuccessful
- Episiotomy, Kielland's rotational forceps followed by Neville Barnes forceps delivery
- Transferred to postnatal ward at 1 hour post birth –
   husband sent home

# **Exhausted**

Helpless

**Afraid** 

Dehumanised

**Brutalised** 

(and trusting, and grateful)

# Postpartum...

- Discharged next day as soon as I could walk
- Poured all my focus into my baby
- Trivialised my birth story when people asked
- Booked into "severe perineal trauma" clinic – FTA (mastitis)
- Second pregnancy...
- "Tell me about last time"





# As maternity caregivers...

- We are all affected by our own experiences
- This doesn't have to be a negative thing
- Adjustment to trauma is not linear, tidy or predictable
- We cannot neatly prevent, predict, or repair trauma with guidelines, protocols, or algorithms
- But we can be mindful of it, and we can be trauma-informed in the care that we provide



# **Trauma Informed Care**

Dr Georgia Heathcote FRANZCOG



# NSW birth trauma inquiry described as 'me too' moment for mothers receives record 4,000 submissions

By Penny Burfitt

Posted Tue 5 Sep 2023 at 5:10am, updated Tue 5 Sep 2023 at 2:03pm



#### **Trauma Informed Care**



**Specific Care** 

#### Definition:

TIC has been used to describe ways in which health care providers can better serve and treat people who have experienced traumatic life events.

#### TIC care seeks to:

- Realise the widespread impact of trauma and understand paths for recovery
- Recognise the signs and symptoms of trauma for patients and staff
- Integrate knowledge about trauma in policies, procedures, practices
- Actively avoid re-traumatisation



By using universal precautions we can reduce the risks for our women of:

1) re-traumatisation

**Precautions** 

2) Primary traumatisation

#### Trauma: a definition



# What is Trauma?

(and what does it do to our bodies?)

Trauma occurs when an event or experience overwhelms normal coping mechanisms

Trauma creates a disruption in the limbic system.

Trauma is not just caused by the event but by the individuals reaction to the event.

The trauma response (fight, flight, freeze, appease) is observed in other species. It is a survival mechanism. Understanding the trauma response can help with empathy toward victim-suvivors.

Previous trauma informs peoples current behaviours e.g. substance abuse (smoking, ETOH etc), avoidant behaviours (poor engagement in health care), dopamine seeking behaviours (binge eating, high risk activities)

Recurrent traumatic events (or ongoing activation from primary trauma) → SNS and HPA axis is chronically activated (cortisol) → HTN, CVD, insulin resistance (PCOS)

Chronic low grade inflammation can affect the nervous system by spread of inflammatory markers intravascularly to adjacent glial cells. Lowers pain threshold.

Lifestyle factors that contribute: poor sleep, smoking/ETOH/drugs, excessive simple CHO, lack of exercise, general stress

## **Practical Tips**



# Universal Precautions

Universal precautions can (and should) be applied to all patients without screening a patient for a history of trauma. Guiding Principles: Safety, Trustworthiness, Choice, Collaboration, Empowerment

Patient-centered communication and collaborative care:

- ask patients about their priorities for the visit
- offer the patient an overview of what to expect during their visit
- prior to physical examination: provide a brief summary of what parts of the body will be involved, letting them know they may ask you to stop if they are uncomfortable at any stage.
- offer for patient to shift items of clothing
- sitting on a chair rather than examination table for discussions
- ask them what can be done to make them more comfortable
- positioning the patient chair closest to door
- offering to have a support person in room with them
- getting down on patients' level- eye level communication

Overall beneficial in building rapport with all patients

- trauma survivors in particular experience higher levels of subjective control if they are encouraged to collaborate in their appointment

Be mindful: reassurance may not help the patient feel any more in control  $\rightarrow$  avoid "nothing to worry about" "you are safe"

## **Practical Tips**





### Midwifery

Volume 111, August 2022, 103388



Review Article

# Birth plans: A systematic, integrative review

ns of

into their purpose process and impact
Effect of Hypnobirthing Training on Fear, Pain, Satisfaction Related to Birth, and Birth Outcomes: A Randomized Controlled

Effect of Hypnobirthing Training on Fear, Pain, Satisfaction Related to Birth, and Birth Outcomes: A Randomized Controlled Trial

Catherine

Gonca Buran, RN, PhD D, and Hilmiye Aksu, RN, PhD View all authors and affiliations

Volume 31, Issue 5 https://doi.org/10.1177/10547738211073394

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Published in final edited form as: Obstet Gynecol. 2014 Jun;123(6):1344-1347. doi:

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Ensure ac

#### **Responding to Prenatal Disclosure of Past Sexual Abuse**

**Amina White** 









#### **Trauma Informed Care**



# Obstetric Violence

Birth trauma can exist without the presence of Obstetric Violence

**BUT** 

Obstetric Violence significantly increases the risk of traumatisation

## Women's Experiences

#### Prioritising the care provider's agenda > woman's

"I begged not to have a CS, neither I nor my baby were in distress or danger but the doctor was ready to go home.."

"the doctor asked a student nurse, first day on the job, if she wants to suture my episiotomy"

#### Lies and threats

- "Do you want a dead baby?"
- "I was basically told that if I didn't have a CS on their timetable I would kill my baby..."
- "Lots of coercion and being told my baby would die if I didn't consent to the CS."



#### Disregarding embodied knowledge

- "I felt like I was being told I was silly for thinking I was in labour. My opinion was dismissed and ianored."
- "Hospital staff didn't listen to me, didn't trust me to know my body".

#### Violation

- "I felt bullied, I felt violated, I felt disempowered not having the right to do with my body what I wished."
- "I was young and scared, I had 20 midwives attempt to examine me. One yelled at me to relax because she couldn't fit her fingers in."

#### **Trauma Informed Care**



# Summary

- Trauma is a physiologic process that can have significant long term health impacts for survivors
- Trauma is common, we should be mindful to interact with all patients as trauma survivors
- Patient-centred communication & collaboration
- Acknowledge trauma prevalence, be respectful in communication, refer to appropriate resources, know your own limitations & responsibilities
- Communication & collaboration with patient particularly important in preventing birth related trauma

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Thank you...
Questions?



# Catherine's House

For Mothers, Babies and Families

Introducing Dr Majella Henry

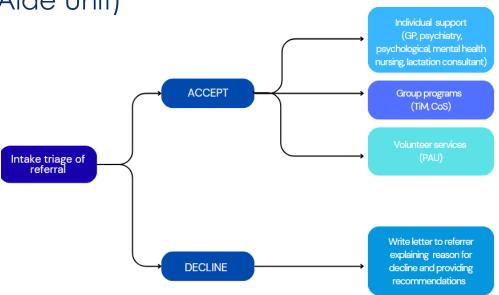
General Practitioner
Parenting Support Centre
Catherine's House
Mater Hospital



# Parenting Support Centre Model of Care

- One outpatient team with specialist offerings
  - Individual support (psychology, mental health nursing, GPs, psychiatry, lactation consultants – up to 4 sessions each)
  - Groups (Together in Mind, Circle of Security, Parenting Education Program)

Volunteer support (Parent Aide Unit)





# **Target Population**

- Birthing and non-birthing parents who are presenting with concerns related to:
- Mental health difficulties which are impacting their pregnancy
- Distress related to upcoming birth.
- Birth trauma or unexpected birth experiences.
- Adjustment to parenting.
- Relationship strain related to pregnancy or parenting.
- Adjustment to infant medical condition.
- Infant feeding difficulties.
- Breastfeeding challenges.
- Mental health difficulties which are impacting their pregnancy or parenting.
- Concerns with infant-parent relationship

# **Model of Care**



- Catherine's House outpatient team offers support to:
- Persons who are currently pregnant or who have a child aged under 1 year and are;
- Birthing parents who are currently booked to birth or have birthed at the Mater Mothers South Brisbane (public or private)
- Non-birthing parents of those who are currently booked to birth or have birthed at the Mater Mothers South Brisbane (public or private)
- Parents and non-birthing parents who live in the Mater public antenatal catchment
- Parents who have a child admitted to NICU
- Using this resource as a step-down from IPU



# Model of care



- The following are exclusion criteria for ongoing outpatient support:
- Acute suicidal or homicidal risk assessment. However, these consumers may benefit from an inpatient stay.
- Assessment and/or management of a primary presenting issue of problematic substance use or dependence

- Assessment and/or management of a primary presenting issue of an eating disorder
- Acute and/or severe mental health symptoms such as psychosis that cannot be managed safely in an outpatient setting
- Patients that are currently or could be appropriately treated by another service provider (either within Mater or the community) for the same referral reason.

# External Referrals (GPs, community care)



- Single referral form for all outpatient services will be live on website in the coming weeks. In the interim an emailed referral can be sent to <a href="CH.MBF@mater.org.au">CH.MBF@mater.org.au</a>
- Our brief intervention (4 session remit) for psychology does not require a MHCP
- Once available the new referral form will supersede existing individual service referral forms for outpatient services at PSC.
- Triage clinicians at PSC will triage all referrals, written feedback to be provided to referrers in cases of declines

# **Self-Referrals**



- Self referrals will continue for birthing parents accessing lactation consultations and GPs only
- Please note LC services are available to Mater families only
- Birthing parents can phone PSC (ph 3163 2299) to complete this referral over the phone or complete a paper copy available on the website



## Catherine's House



- 8 Public beds, 2 Private beds
- Inpatient team psychiatrists, registrars, nursing, psychologist, occupational therapist, social worker, physiotherapist, child health nurse, GPs, peer workers
- Eligibility criteria
  - Mental health needs that cannot be met adequately in the community
  - Diagnosis of
    - Severe depression
    - Severe anxiety
    - Schizophrenia
    - Psychosis, including post partum psychosis
    - Bipolar Affective Disorder
    - Complex mental health problems (history of trauma, personality disorder, past substance misuse disorder) that is impacting significantly on parenting
  - Parent is the primary caregiver of a baby <12 mths</li>

# How to refer: Catherine's House home page









# Dedicated perinatal mental health support

Catherine's House for Mothers, Babies and Families is Queensland's first integrated perinatal mental health service, featuring a dedicated Inpatient Unit with 10 rooms.

There are eight rooms for public patients and two for private patients where parents can stay with their babies while receiving treatment and care.

The In-patient Unit delivers specialist support for parents experiencing severe depression, anxiety and other mental health diagnoses in the first year of their baby's arrival.

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# A little update on PSC approach



- Weekly the psychologists run a **Managing Emotions** after Birth on the maternity floors. Birthing and Nonbirthing parents welcome. Birth trauma resources shared. Follow up phone call with patients if requested.
- Birth trauma Project
  - Currently sitting with Ethics, hopeful to get started in 2026
  - Usual psychological therapies (debrief, grounding, CBT, ACT principles) VS EMDR (Eye movement desensitisation and reprocessing).

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Thank you...

Questions?

'THE CULTURAL SIGNIFICANCE OF THE WOMB'

A TRAUMA
INFORMED CASE
STUDY
BY JACQUI
FREEMAN
REFUGEE MIDWIFE



# Background

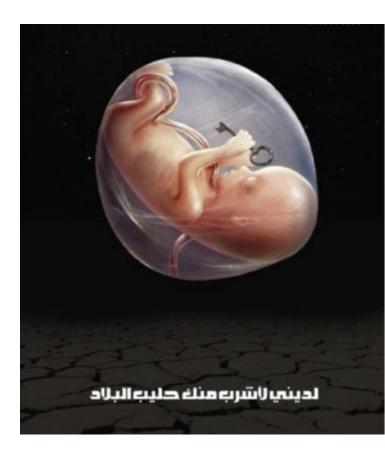
Ayaan (pseudonym) is a 35-year-old Somali woman, gravida 7 para 6 (G7P6), who migrated to Australia several years ago. All six of her previous births were via caesarean section. At her 20-week morphology ultrasound, Ayaan was diagnosed with placenta accreta with suspected increta involvement.

#### **Emotional Response:**

- -Anxious withdrawn and tearful
- -Not wanting to engage in medical care

Feelings of isolation and shame

-Distrust in the medical system and an immense unwavering faith to be protected.



## **Reflection:**

 This is the time in a woman's pregnancy that as GPs in the community you are beginning the referral process to hospital care. What are some of the indications for referral at this stage?



# Trauma Informed Care - The 5 Principles

01 Safety

02 Trust

**03** Cultural Support

**04** Collaboration

**05** Empowerment

THE WOMB

A DEEP SPIRITUAL SIGNIFICANCE



# Trauma-Informed and Culturally Safe Interventions

- 1. Establishing Safety and Trust
- 2. Promoting Empowerment and Control
- 3. Validation and Emotional Support
- 4. Multidisciplinary and Cultural Support





#### The Photo by Photo Auth of Brie Erys & Aunder CCYYSA.

# Reflection:

Ayaan has now been discharged back into the community with her baby you have received her discharge summary from the obstetric team. Upon reading the birth history how could you appropriately take over care to ensure this family does not get lost in the system?

# THANK YOU FOR YOUR TIME



#### References:

#### **References (APA 7th Edition)**

- Australian College of Midwives. (2021). *Position* statement: *Trauma-informed care in maternity services*.
- □ Australian Government Department of Health. (2020). *National Framework for Culturally Responsive Health Services*.
- □ Degni, F., Suominen, S., Essén, B., & Vehviläinen-Julkunen, K. (2012). Communication and cultural issues in providing reproductive health care to immigrant Somali women in Finland. International Journal of Nursing Studies, 49(2), 151–160.
- Hegarty, K., Tarzia, L., Hooker, L., & Taft, A. (2017). Responding to women experiencing trauma in maternity care: A trauma and violence informed approach. Women and Birth, 30(2), 103–107.
- Pavlish, C. L., Noor, S., & Brandt, J. (2010). Somali immigrant women and the American health care system: Discordant beliefs, divergent expectations, and silent worries. Social Science & Medicine, 71(2), 353–361.
- Substance Abuse and Mental Health Services
   Administration (SAMHSA). (2014). Trauma-informed care in behavioral health services (Treatment Improvement Protocol 57).
- □ Wilson, A. N., et al. (2021). Providing culturally safe maternity care for migrant and refugee women: A scoping review. Midwifery, 95, 102915.
- □ World Health Organization. (2018). Care of women and girls living with female genital mutilation: Clinical handbook. Geneva: WHO.

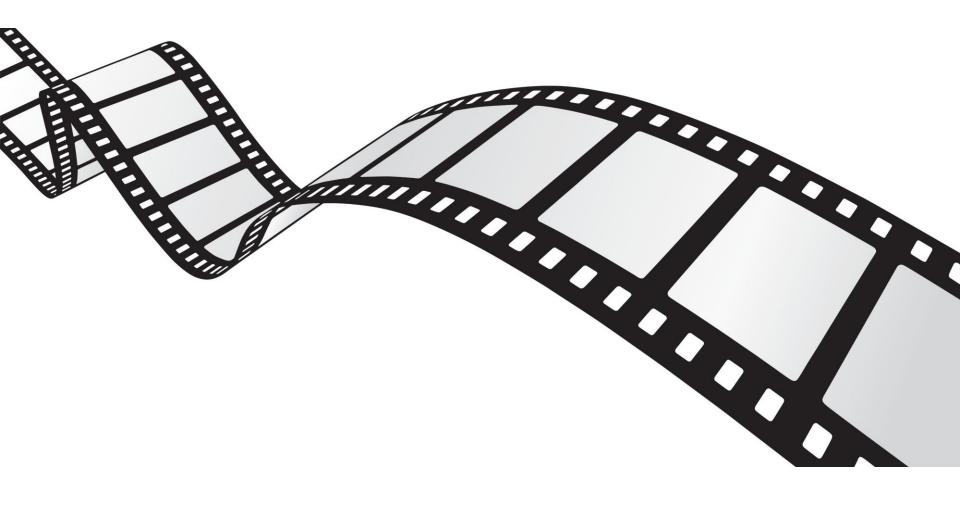


# A word from our sponsor: Corporate Affairs & Growth

Presenter: Trudy Braybrook



# Break - we resume at 11:10





## **SESSION 2:**

Time	Session	Who
10:45	Neonatal Examination	Video
10:55	Breastfeeding	Megan Fry Lactation Consultant
11:15	Case work	Dr Georgia Heathcote Dr Majella Henry Shannon Shorthouse Jacqui Freeman
12:55	Conclusion	Dr Maggie Robin



# Lactation & Breastfeeding GP Education

# Physiology



#### **Puberty**

Lobule type 1 formed

#### **Each Menstrual Cycle**

Hormones stimulate production of new alveolar buds = lobule type 2

#### Pregnancy

Stage II mammogenesis
Increased breast tissue &
proliferation of secretory tissue

Secretory
Initiation
occurs in 2<sup>nd</sup>
half of
pregnancy

Small amounts of milk can be secreted by Week 16

Secretory
Activation
'milk coming
in' Day 3-5

'Mature' milk (around 6 weeks' p/n) is controlled by feedback mechanism

# Milk Timeline



- ✓ Colostrum from late pregnancy until approximately 72-96 hours
- ✓ Usual for volumes of colostrum to decrease around Day 2 before 'milk coming in'
- ✓ Sec. Activation = Rapidly increasing volumes & full-feeling, heavier, firmer, warmer breasts – usually from Day 3-10
- ✓ Expect breasts to feel slightly lighter, relieved and softer after breastfeeds but unlikely to feel significantly softened until after Day 14
- ✓ Hormonal influence supports increasing milk production in first 6 weeks low likelihood of increasing supply post-6 weeks

# Usual feed timing & patterns



- ✓ On demand feeding following cues
- ✓ At least 8 feed sessions each 24 hours for the initial 6 weeks
- ✓ Day 1-3 has no 'usual' cluster feeding is expected & stimulates Secretory Activation
- ✓ Range from 6-12 feeds each 24 hours based on breast storage capacity

- ✓ Usual breastfeed duration is 10-40 minutes
- ✓ Ideally feed from both breasts each feed – especially in the initial 6 weeks
- ✓ Alternate '1st breast' each feed session
- ✓ More frequent feeds in afternoon/evening

## Interpreting Babies



#### Feeding Cues:

- Alert
- Wriggly
- Routing
- Sucking hands, etc.
- Vocalising

#### Satiety Signs:

- Relaxed muscles
- Eyes close
- Longer pauses
- Relaxed open hands
- Settles when detaches from breast

# Adequate Milk Intake Signs:

- Demand feeding & settling for ≥1h
- Frequent swallowing
- Expected output
- Weight gain
- Meeting milestones

'Pain' is subjective



Breast/nipple pain

Breast:
Shooting?
Pulling?
Specific area?

Compressed nipple?

Tenderness?
Stretchy?
Sensitive?
Stinging?
Vacuum?

Sharp? Stabbing? Slicing? Blanching nipple tip?

Initial 30-60 seconds?

Causing skin damage?

Consistent throughout feed?



# Nipple trauma/damage

Triangle
Ridged
'New
Lipstick'
'Ski slope'

White ridge of skin on nipple tip

Bleeding? Scabbed? Blistered? Compression bounces back within few seconds?

Correct attachment

Continue
breastfeeding
if you can
OR
'Rest &
Express'

Nipple care

Maintain supply



# Engorgement

- ✓ On-demand breastfeeding 24/7
- ✓ Ensure correct latch
- ✓ Cold packs
- ✓ NSAIDs
- ✓ Reverse Pressure Softening
- ✓ Lymphatic Breast Massage
- ✓ Therapeutic US
- Avoid excessive milk removal or stimulation
- ✓ Avoid use of breast pump
- ✓ Lactation support
- ✓ Avoid deep/firm massage
- ✓ Avoid too-tight clothing

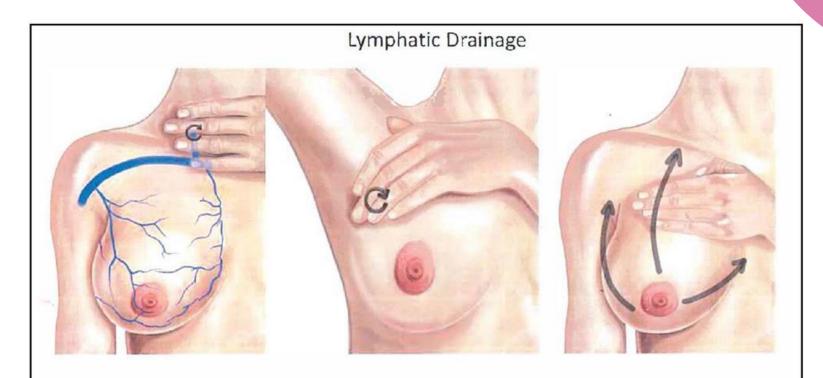


https://www.bfmed.org/protocols

ABM Mastitis Parent Handout

# Lymphatic Drainage





- Reduces swelling by assisting movement of lymph fluid, decreasing edema, softening fibrosis
- Technique
  - "Very gentle touch/traction of skin "like petting a cat" (lift skin to allow flow of lymphatic drainage/vascular decongestion)
  - Ten small circles at junction of IJ and subclavian vein
  - · Ten small circles in axilla
  - Continue with light touch massage from nipple towards clavicle, axilla
- Start during pregnancy if experiencing painful rapid breast growth, and use as needed postpartum for engorgement

Technique of lymphatic drainage

Kelly Rosso, MD Reproduced with permission



## Low Milk Supply

A guide for expected volumes each 24 hours, if exclusively expressing:

- By day 5 = 200-300ml
- By day 7-8 = 400-500ml
  - By day 14 = 750ml
- Thereafter: 750-1000ml
- Note, mothers of preterm babies will need to produce more milk by day seven (500-700ml) to ensure enough supply when baby is older

(Mater Expressing Breastmilk General Information consumer factsheet, 2023)

- ✓ Optimise breastfeeding
- ✓ Express session 1:1 Top up given ✓ Power-pumping
- ✓ Breast compression during BF
  ✓ Domperidone
- ✓ Switch-feeding
- Galactagogue foods

- ✓ IBCLC involvement



## Oversupply

'No precise definition for [oversupply] exists... An average term infant consumes 450-1200ml daily, and production volumes higher than this may represent hyperlactation.'

- 1. Self-induced
- 2. latrogenic
- 3. Idiopathic

Hyperprolactanemia ≠ hyperlactation

#### Signs

- Excessive breast growth during pregnancy
  - Persistent or frequent breast fullness
    - Breast pain
    - Copious milk leakage
    - Recurrent blocked ducts
      - Recurrent mastitis
        - Nipple blebs
        - Vasospasm
- Excessive infant weight gains
  - Fussiness at breast
  - Choking/coughing
  - Clamping down on nipple
    - Short feedings
    - GI symptoms



# Infant Oral Function Restrictions

What are the signs and symptoms associated with a tongue-tie?

#### For baby

- Difficulty latching or coming on and off the breast (not maintaining their latch)
- Getting tired quickly during a feed but not satisfied after the feed after the first few days after birth
- Long endless breastfeeds
- Gumming or chewing at the breast
- Little or no weight gain
- Not able to lift the tip of their tongue towards the roof of their mouth
- Not able to poke their tongue out past their lips
- Not able to move the tip of the tongue sideways
- A thin or thick piece of skin visible on the underside of the baby's tongue which may be attached towards the tip of the tongue and the bottom gum
- The tip of the tongue may look heart-shaped or V shaped or has a notched tip

#### For mother

- Nipple damage or pinched/creased nipple after baby comes off the breast
- Nipple pain during breastfeeding
- Unable to 'let-down' milk due to pain
- Breasts not softening after a feed
- Blocked milk ducts and/or mastitis (breast infection)
- Low milk supply



#### Advice...



- ✓ Australian Breastfeeding Association 24/7 helpline
- ✓ 13Health and discuss with Child Health Nurse
- ✓ Child Health Clinics
- ✓ Mater Parenting Support Centre
- ✓ ABA website HCP site and fact sheets
- ✓ ABM protocols
- ✓ Pharmacological advice: Monash Health Medicines Information Centre M-F 9-5pm. (03) 9594 2361, Rodney Whyte (senior pharmacist)
- ✓ LCANZ.org Private IBCLCs in community

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#### IBCLC ASAP



- Symtomatic of infective mastitis
- Suspicious of abcess
- Unable to move any milk baby or expressing
- Significant concerns re: infant weight
- Significant concerns re: milk supply

[Footer]



# Thank you

# Small group work

Antenatal case studies









#### Meet the facilitators...



Dr Lok Tung Lee, Antenatal Clinic GP
Dr Georgia Heathcote, MMH FRANZCOG
Shannon Shorthouse, Bereavement Midwife
Megan Fry, Lactation Consultant



#### Case work:



We will break into 4 small groups for 30 minutes, each with a different case

# Identify for your patient, your individualised PLAN for:

- Assessment
- Screening/investigations
- Ongoing management
- Referrals & resources

#### Case work:



We will then reconvene and spend 10 minutes summarising each case

An enthusiastic <del>victim</del> volunteer from each group will outline 3 key points from each trigger of the case.

There will be chocolate ©

#### Scenario 1: Mai - Trigger 1





- Mai is 41 yrs old
- Presents with PV bleeding for the last 2 days, "heavy" for the last 6 hours (soaked 2 pads in 6 hours, mild low abdo pain)
- She thinks she is around 7 weeks pregnant by menstrual dates (positive home pregnancy test).
   She hasn't seen anyone yet about this pregnancy.
- Obstetric history: G5P2M2
  - 2 previous SVB (children now aged 13 & 15)
  - 2 miscarriages, 12/12 ago and 6/12 ago (first 8/40, D&C; second 6/40, conservatively managed)
  - Regular periods, certain dates
- Sexually active with one long-term partner (husband)
- Trying to conceive keen for another child now that her older kids are growing up
- PMHx unremarkable, cervical screening UTD / normal
- Taking a prenatal multivitamin
- HR 112, other observations in normal range
- Soft, non-tender abdomen
- Urine hCG positive

# Scenario 1: Mai – Trigger 2





- You have access to same-day USS and pathology, so decide to send Mai for investigations as an outpatient
- You educate re red flags and book a review appointment the following day
- Mai returns for results. Her bleeding has settled overnight and she is pain-free.

#### **RESULTS:**

- Quantitative HCG 4000, B Rh positive, FBC normal
- TV USS: intrauterine gestational sac with a yolk sac and a 5.8mm fetal pole, no fetal heartbeat seen
- Mai would like to know what the plan is from here

#### Scenario 1: Mai – Trigger 3





- You tell Mai she has an intrauterine pregnancy, but the viability is uncertain
- You advise 48 hour hCG, and a repeat TV USS in 11 days
- 48 hour hCG is 3500
- Follow-up USS is unchanged (IUP, 5.8mm fetal pole, no FHB)
- You call to inform her. She has had no further bleeding.
- What are Mai's options now?
- Are there any other considerations you should discuss?

## Scenario 2: Anita - Trigger 1



- Anita is 36 years old and new to your clinic, having recently moved from interstate with her partner and 14 month old toddler son, Jack.
- She comes to see you following a positive home pregnancy test. This is her second pregnancy.
- LNMP was 7 weeks ago, although her cycles are irregular and she's still breastfeeding Jack 3-4 times per day.
- You ask about her previous birth and she tells you she went to hospital in early labour at 37+3. She had vaginal bleeding and had a category 1 emergency caesarean under general anaesthesia for suspected placental abruption – though thankfully baby Jack was born in good condition and there was no obvious sign of abruption at delivery.
- As she recounts her story, Anita looks away and says quietly, "it was horrific, and I want this time to be different".
- What are your priorities at this visit?



## Scenario 2: Anita – Trigger 2



- Anita is now 20/40
- Her pregnancy has been going well, with reassuring antenatal investigations
- She comes to see you after her morphology scan
- The scan shows normal fetal morphology, and a transabdominal cervical length of 43mm. The report comments "the placenta is anterior and low-lying, 4mm from the internal os. Repeat scan is recommended at 34 weeks."
- Anita tells you that she's hoping to avoid intervention of any kind. She's planning to have a home birth with a private midwife, with the maternity hospital as "backup", in the event of an emergency.



## Scenario 2: Anita – Trigger 3



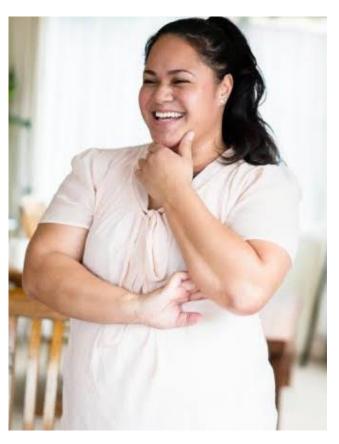
- Anita is now 34+2/40
- You haven't seen her since 20 weeks, as she has been seeing her private midwife for antenatal care
- You are cc-d into an ultrasound report from the maternity hospital that was done yesterday – it reports cephalic presentation, estimated fetal weight on the 60<sup>th</sup> centile, normal amniotic fluid index and Dopplers. The placenta "remains low-lying, 10mm from the internal os."
- Anita comes to see you for her DTPa vaccine. You mention the scan result, and ask her how she's going.
- Anita begins to cry and says "I just feel like everything's stacked against me – I'm terrified about giving birth in a hospital again. I feel like my choices are being ripped away from me."



#### Scenario 3: Lani – Trigger 1

- Lani is 37 years old, G4P3(-1). You've met her when she's attended with her kids, but not seen her as a patient before.
- She comes to see you after a positive pregnancy test, and thinks she's around 10 weeks by menstrual dates.
- Lani's first baby was born in Samoa 10 years ago, an uncomplicated SVB of a 4.1kg boy.
- She moved with her family to Australia 8 years ago.
- Her second pregnancy, 6 years ago, was complicated by gestational diabetes, treated with Metformin. She had an induction of labour at 39 weeks with SVB of a 4.5kg baby girl.
- Lani's third pregnancy, 2 years ago, came at a difficult time, when her father was dying of heart failure. She had limited antenatal care, with no investigations after the first trimester and no GDM screening. She presented to hospital at 36 weeks with decreased fetal movements, and sadly her baby boy was stillborn the following day, weighing 4.4kg. The family declined an autopsy.
- Lani's BMI is 35.
- What are your priorities at this visit?





# Māori & Pasifika patients - considerations



A 2018 study of Māori and Pasifika women in the Logan Maternity catchment found that compared to the general population of childbearing women, Māori and Pasifika women were more likely to:

- experience gestational diabetes mellitus and obesity
- present for initial antenatal visits at later gestations

And less likely to attend recommended antenatal visits.

Major barriers to accessing services included:

- Poor communication
- Lack of cultural safety
- Financial constraints

Enablers to care included:

- Continuity of midwifery care
- Care that was delivered in the community & was culturally safe

Reference: Henning Cruickshank A, Lilley TS, Radcliffe B, Nosa V, Fenwick J. Māori and Pasifika perceptions of their local maternity care in Logan, Australia. Women Birth. 2019 Jun;32(3):e359-e365. doi: 10.1016/j.wombi.2018.08.164. Epub 2018 Sep 5. PMID: 30193912.

# Resources for Māori & Pasifika families



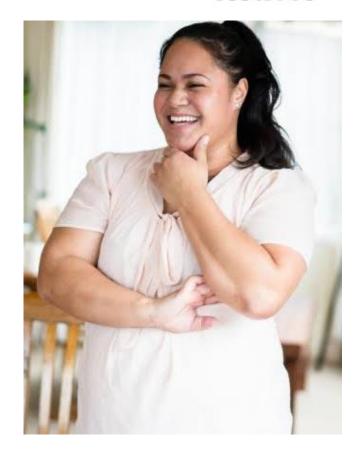


#### Scenario 3: Lani – Trigger 2

### †mater

- It's two weeks later and Lani returns for a review.
- Ultrasound confirms a live IUP, and she's now 12/40 by both menstrual and scan dates.
- Her urine and blood tests are normal, other than HbA1c of 7%.

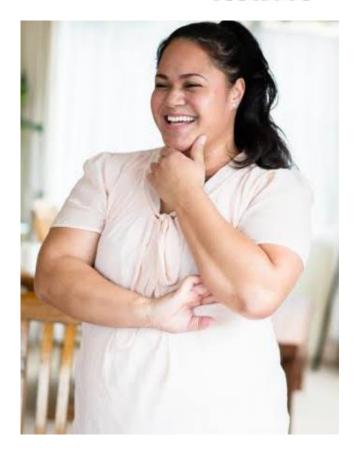
How do you counsel Lani about this result?



#### Scenario 3: Lani – Trigger 3

### †mater

- Lani is diagnosed with Diabetes in Pregnancy and has the majority of her care through PALC (Pregnancy after Loss Clinic) with Obstetric Medicine input.
- She is commenced on insulin and her pregnancy has been going well.
- At 32/40, you see her when she brings her daughter in, with an acute viral URTI.
- Lani mentions to you that she's feeling a bit under the weather herself, and that her baby isn't moving as much as normal today.
- She says "maybe I'm just nervous because of what happened in my last pregnancy, probably everything is fine".



How would you respond?

#### Scenario 4: Jade – Trigger 1





- Jade is 26 years old, G1P0
- You've been her GP since she was in high school and you're now providing shared care in her first pregnancy
- Jade has had an uneventful pregnancy so far, and she and her partner Aaron are looking forward to meeting their baby
- She's here for her 34 week visit
- Consider routine priorities for a 34 week antenatal check
- During the visit, Jade says: "It's all getting really real now! I'm feeling pretty nervous about the birth. Any suggestions to help me prepare?"

#### Scenario 4: Jade – Trigger 2



- Jade returns to see you at 7 days postpartum, accompanied by Aaron and their baby daughter, Hannah
- You know from the discharge summary that Jade presented to hospital at 40+6 with spontaneous rupture of membranes
- After 24 hours, she commenced augmentation with IV Syntocinon
- Jade had a ventouse delivery for a prolonged second stage, with an episiotomy that extended into a 3B perineal tear, repaired in theatre
- Her EBL was 800ml
- Baby Hannah was 3800g and born in good condition
- Amazingly, Jade has booked 30 mins for herself, and 30 for Hannah
- Aaron's mum is staying to support them. Jade mentions that Aaron's mum is worried Hannah isn't getting enough milk, and wants Jade to ask you if she "needs topping up".

#### Scenario 4: Jade – Trigger 3



- Jade & Hannah return to see you at 2 months postpartum
- Jade tells you that her bleeding ceased around 2 weeks ago. She is exclusively breast feeding.
- She hasn't yet resumed intercourse "I'm a bit scared to. Things feel different down there. I'm worried I might have a prolapse."
- Jade's also concerned about baby Hannah "she cries a lot, especially after feeds. She just seems unsettled. Could she have reflux, or a tongue tie, or something?"
- Baby Hannah examines normally, and is growing well along the 75<sup>th</sup> centile.

#### ੀ mater



# Neonatal Examination video

Dr David Cartwright

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## Wrapping up...





# Educational Opportunities

In Perinatal Care

# Are you interested in a GP Clinical Observership in Antenatal Clinic?



- An opportunity for GPs to gain "hands on bellies" experience in antenatal care
- Nov & Dec 2025
- Half or full-day sessions as a clinical observer:
  - Antenatal history taking & counselling
  - Clinical examination experience
  - Connect with midwifery & obstetric colleagues
- Minimum 2, up to 20 sessions
- Attendance certificate will be provided
- Hours can be claimed for CPD as EA and RP
- Express your interest ASAP to Judy Edy (MMH Senior Administration Officer) at: judy.edu@mater.org.au



#### YOU ARE NOT YET ALIGNED!!



#### You need to:

- Complete the Questionnaire within 4 wks with an 80% pass
- 2. Complete your paperwork,
  - --this may take up to 8 weeks.
- 3. Please provide your email address
- 4. Self log your RACGP hours:
- 2 hours EA, 2.5 hours RP
- hours spent on pre-learning at your discretion
- 5. We will send you a certificate that you can upload if you wish.

# To maintain your alignment

Every 3 years, you must either:

#### Do another Alignment:

- at MMH (we have 4 versions) or
- MSHHS or MNHHS and complete an online bridging program + quiz

#### OR

Complete the MMH online realignment and bridging course (90 minutes) and quiz and complete an attestation form that you have:

- a) reviewed the current MMH/GPSC guidelines and/or SpotOnHealth Pathways
- b) attended a minimum of 6 hours CPD relevant to Women's Health in the past 3 years. Provide supporting documentation if requested

### Contact details



# Alignment status, contact details, evaluation, training & RACGP enquiries?

- Phone Mater Education on 3163
   1500
- Fax 3163 8344
- Email <u>mscadmin@mater.org.au</u>

# The End!



GOODAFTERNOONAND THANK YOU!